

THE WHITE HOUSE
NATIONAL ADVISORY COMMISSION ON LIBRARIES

Minutes of Meeting

Corrected and Approved

Session: Sixth

Date: May 22-23, 1967

Place: May 22--Library of Congress
Washington, D. C.

May 23--Carnegie Institution of Washington
Washington, D. C.

Mrs. Jeanne Hines, Reporter-Digestor
Dr. Taylor Cole, Provost,
Duke University

Witnesses:

Present from the Library of Congress were:

Dr. L. Quincy Mumford, Librarian of Congress
Mr. John G. Lorenz, Deputy Librarian of Congress
Mrs. Elizabeth E. Harner, Assistant Librarian
Mrs. Marlene D. Morrissey, Executive Assistant to
the Librarian of Congress
Mr. Paul L. Berry, Director, Administrative
Department
Mr. Lewis C. Coffin, Law Librarian
Dr. Roy P. Basler, Director, Reference
Department
Mr. William J. Welsh, Acting Director,
Processing Department
Mr. Marvin W. McFarland, Chief, Science and
Technology Division
Mr. Abraham L. Kaminstein, Register of
Copyrights
Mr. Lester S. Jayson, Director, Legislative
Reference Service
Mr. Paul R. Reimers, Coordinator of Information
Systems

Afternoon Session:

Committee A:

Miss Alice Ball, Executive Director,
United States Book Exchange
Miss Germaine Krettek, Associate Executive Director,
American Library Association, and Director, A. L. A.
Washington Office
Mr. Edwin Castagna, Chairman, Legislation Committee,
American Library Association
Mr. Paul Howard, Executive Secretary,
Federal Library Committee

Mr. Henry J. Gartland, Director of Libraries,
Veterans Administration
Mr. Burton E. Lamkin, Chief, Library and Information
Retrieval Branch, Federal Aviation Administration

Committee B:

Mr. Hubert E. Sauter, Deputy Director, Clearinghouse
of Federal, Scientific and Technical Information
Mr. Melvin S. Day, Deputy Assistant Administrator,
Office of Technical Utilization, N.A.S.A.
Mr. Edward J. Brunenkant, Director, Division of
Technical Information, U. S. Atomic Energy Commission
Mr. Walter C. Christensen, Staff Assistant for
Scientific Information, Department of Defense
Mr. Abraham L. Kaminstein, Register of Copyrights
Library of Congress

May 23, 1967

Witnesses:

Present from the Office of Education were:

Mr. Harold Howe II, Commissioner of Education
Dr. Grant Venn, Associate Commissioner, Bureau
of Adult and Vocational Education
Mr. Lee Burchinal, Director, Division of Research
Training and Dissemination
Mr. Ray Fry, Director, Division of Library Services
and Educational Facilities
Mr. Eugene Kennedy, Chief, Library and Information
Science Research Branch
Mr. Alexander Mood, Assistant Commissioner, National
Center for Educational Statistics
Mr. Morris Ullman, Chief, Adult, Vocational and Library
Studies Branch

Executive Session

Opening Remarks.

The Chairman opened the session with an expression of appreciation to the Librarian of Congress for inviting the Commission to meet in the Library's book-lined Woodrow Wilson Room. He remarked that it seemed a most appropriate site for the Commission to hear of the responsibilities that the Library of Congress carries for itself and for the nation.

Dr. Knight then introduced Dr. Taylor Cole, Provost of Duke University, who is to conduct the Commission's study on "The Relation of the Federal Government and Libraries." The meeting was then turned over to Dr. Mumford.

Interviews

Dr. L. Quincy Mumford, Librarian of Congress

Dr. Mumford welcomed the Commission to the Library of Congress and expressed appreciation for this opportunity to explain some of the Library's programs and activities. Summarizing very briefly the History of the Library beginning with its establishment in 1800 for the purpose of providing information to the members and committees of the Congress, the Librarian explained that within a short time the privilege of use of the Library was extended to the other branches and officers of the Government, and in 1882 by statute to the people of the United States--students, scholars, research workers, and the general public. For many decades, therefore, the Library of Congress has served as a legislative library, and at the same time has served the nation. After the burning of the Capitol, in which the Library was housed, in 1814, Thomas Jefferson's personal library was purchased by the Congress, and this collection led to the opening of the Main Library Building in 1897, and the Annex Building in 1938. Today the Library is more crowded than ever before, and plans for a third building are now in progress.

Dr. Mumford outlined the place of the Library in the governmental structure. The Library of Congress is part of the Legislative Branch. The Librarian of Congress is appointed by

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The Commission convened for its sixth meeting at 9:30 a.m. on Monday, May 22, in the Woodrow Wilson Room of the Library of Congress, Washington, D. C., Dr. Douglas M. Knight, presiding.

Commission Members present were:

Dr. Estelle Brodman
Dr. Frederick H. Burkhardt (present May 23 only)
Dr. Launor F. Carter (present May 22 only)
Mr. Verner W. Clapp
Mr. Carl Elliott
Mrs. Mildred P. Frary
Dr. Herman H. Fussler
Mrs. Marian G. Gallagher
Mr. Emerson Greenaway
Dr. Caryl P. Haskins (present May 23 only)
Dr. William N. Hubbard, Jr.
Dr. Douglas M. Knight (Chairman)
Mr. Dan M. Lacy
Mrs. Merlin M. Moore
Dr. Carl F. J. Overhage
Dr. Wilbur L. Schramm
Mrs. George Rodney Wallace
Dr. Stephen J. Wright (present May 22 only)

Absent were:

Dr. Alvin C. Eurich
Dr. Harry H. Ransom

Also present were: *

Mr. Melville J. Ruggles, Executive Director,
National Advisory Commission on Libraries
Dr. Daniel J. Reed, Deputy Director,
National Advisory Commission on Libraries
Miss Rita A. Lawrence, Secretary
National Advisory Commission on Libraries

the President with the advice and consent of the Senate. He reports to the Congress. From the early days there has been a Joint Committee on the Library. In 1897 the Joint Committee held hearings on matters concerning the Library when it moved into the new building. But the Appropriations Committee soon proceeded to write what might be called a brief charter for the Library together with its appropriation. It gave the Librarian of Congress the authority to make rules and regulations for the administration of the Library and to appoint staff purely on the basis of fitness for duty. The Joint Committee on the Library has been very helpful as an advisory committee; the chairman and vice-chairman are available continuously for consultation. The Library also has close relationships with the Senate Rules and Administration Committee and the House Committee on Administration. Legislation pertaining to the Library is referred to these Committees. The Library also has direct contact with the sub-committee of the House and Senate Appropriations Committees.

During the 19th century the acquisitions pattern was fairly well established. In addition to acquiring materials by purchase, the Library received materials through copyright deposit (in 1870 the Copyright Office became part of the Library), international exchange (established by statute), special purchases by the Congress, gifts (some of them very important), and transfer of materials from other Government agencies.

The Library has grown steadily in respect to its collections. The collections now total about 55 million pieces, 14 million of these in conventional book form and 41 million in non-book form, including 29 million manuscripts and 12 million maps, prints, photographs, music, recordings, and other materials deemed to be useful for reference and research today and tomorrow.

As to the budget, when Dr. Mumford came to the Library in September 1954 the Library's annual budget was approximately \$9,500,000. For the current fiscal year the appropriations made directly to the Library are in excess of \$32,000,000. It has requested approximately \$38,500,000 for the next fiscal year. In addition, considerable funds are received from other agencies for work done for them, and there is income from gift and trust funds. The total funds available for expenditures for this fiscal year are approximately \$44,000,000. If requests for next year are granted, total funds would approximate \$53,000,000.

Space has been a growing problem for many years. By 1954 it was apparent that more space was an absolute essential. Although the Congress authorized the planning of a third building in 1961, circumstances delayed the planning until last year when the Congress authorized a third Library building on the site on Independence Avenue across from the Main Building. Planning is now going forward; the Library Staff has been working with the designated architects, who have submitted a report to the Architect of the Capitol. The next step will be to obtain funds for final drawings. A minimum of five years will be required to complete the structure. In the meantime, Congress has authorized additional rental space. The card distribution service and the preparation of book catalogs are housed in the Naval Weapons Plant; the Division for the Blind and Physically Handicapped is occupying rental space; negotiations are underway for additional rental space.

The new building will contain approximately 1,600,000 net square feet--more than the present two buildings combined (they total about 1,250,000 net square feet). Dr. Murnford gave some details about the planning. Six floors above ground and three and one-half below ground are planned, with a tunnel connecting the new to the old buildings. The building will have almost 100 percent flexibility, so that all space can be used interchangeably for book storage, work space, staff space, office space. Stacks will be free-standing on the floors.

A computer center, planned for the top floor, will have equipment for teleprocessing and communication with outlying libraries on an on-line or off-line basis. All areas of the Library will have access to the machine area via coaxial cable.

There were questions from Commission Members on the building plans. Dr. Hubbard asked about some of the problems in planning for a library of the future. How much should be invested for full flexibility in contrast to a building of limited flexibility. Dr. Murnford explained that while it costs more to have all floors of sufficient weight bearing capacity to hold bookstacks, the additional cost is not prohibitive, and it is felt that the advantages to having a truly flexible building far outweigh the higher cost factor. There will be a great deal of non-book material in this new building--manuscripts, prints and photographs, music, rare books, and many other books also.

But there will also be room for considerable staff. Dr. Mumford mentioned that the \$75,000,000 cost authorized by the Congress does not include equipment. Mr. Lacy pointed out that the \$30-\$32 net square foot cost is for monumental architecture in keeping with the other buildings on Capitol Hill and should not be compared with costs for more usual library buildings.

Dr. Mumford explained the plans for the Madison Memorial Hall in the third building. This Hall will occupy approximately 10,000 square feet on one floor and will be two stories high. The Library will have responsibility for administration of the Hall, which will contain documentary materials and other items relating to Madison.

In response to a question from Dr. Schramm about future storage of materials, Dr. Mumford told of the Library's plans to use compact storage for certain kinds of materials. He spoke of the current microfilming program and the plans for intensifying use of film in the national preservation program. Already a considerable percentage of the file on older newspapers is on film. Attention is being given currently to the problem of brittle books. The Library is working in cooperation with other specialists in this area in the testing of various preservation methods.

Dr. Schramm asked about miniaturized storage, and Dr. Mumford anticipated that as further developments take place more of the Library's collections will be reduced into smaller, more compact form. However, there is also a strong argument for preserving much of the collections in their original book form for use of those who want to study the book for purposes other than the text. Mr. Clapp noted that miniaturization is not an end in itself; it is done for a variety of reasons. The principal reason for miniaturization is preservation; its usefulness as a space saver is only incidental. Mr. Lacy mentioned that it has been argued that miniaturization is more costly than maintaining materials in their original form. Dr. Schramm thought it behooved a library to consider storing less-used materials in lower-priced space.

Dr. Mumford then turned to the organization of the library, which has six departments--the Administrative Department, which has the responsibility for building management, fiscal operations, etc.; the Copyright Office, which administers the

copyright law; the Law Library, whose legal collections, including foreign law, are the largest in the world; the Legislative Reference Service, which provides special services to the Congress. (Dr. Mumford stressed the fact that in serving the Congress the Library is serving the nation because the research done for the Congress is reflected in legislation affecting the nation); the Processing Department, with responsibility for the acquisition and organization of materials; and the Reference Department, which has custody of the general collections and certain special collections, and has responsibility for recommending additions to these collections and for providing reference and other services from them.

Referring again to the Library's national responsibilities, Dr. Mumford explained that without a charter spelling out responsibilities, but with broad powers, the Library of Congress has been able to undertake more national library functions than perhaps any other national library in the world. He outlined some of these, including developing and maintaining collections that reflect not only the national heritage but are also international in scope; serving as a national center for research; administering the copyright law and the international government documents exchange program; serving as a national center for cataloging; maintaining national union catalogs; providing services outside the Library's premises through inter-library loan and photoduplication; developing extensive bibliographic programs, including areas and subject bibliographies; conducting research on national library problems, such as preservation. Through various authorizations and appropriations over the years, the Congress has permitted the Library to go forward in performing these national library functions while also maintaining an intensive service to the Congress. "There are some activities that we have not been able to undertake," he said, "but it is questionable whether a detailed charter, which so many urge, would help or hinder by, perhaps, defining areas of responsibility too closely."

"L C does feel that formal recognition by the Congress of its dual role as Library of Congress and as the National Library of the United States would be helpful. This requires more than a Congressional Resolution, which could probably be obtained at any time. There needs to be a felt demand from the country strong enough to convince the Congress, not just to vote for a subtitle 'The Library of Congress, the National Library of the United States',

but to vote the funds to support National Library as well as L C functions. Basically, it is support that L C needs to fill an even broader role as the National Library. If the money were available (now that adequate space is in prospect), there is probably little that could not be undertaken.

Dr. Mumford continued: "If the Commission can focus upon L C's role in the nation's library economy and on the need for formal recognition of, and funding for, its National Library functions, and if the Commission can find a pattern of organization and of Congressional bookkeeping that will not necessarily attribute all the National Library funding to the cost of running the Legislative Branch, I believe that the Nation can have and we at L C can be an effective National Library. This I think, calls not only for serious consideration by the Commission, but continuing attention by a permanent National Commission on Libraries which I advocated as early as 1962."

Dr. Wright asked about the "kind of things you would like to do as a national library that you are not now able to do." Dr. Mumford mentioned the desirability, if funds could be made available, of extending the shared cataloging program to other parts of the world. The Library would like to be of assistance to other libraries in other ways, for example, by producing and issuing more bibliographies. The Library is asked at times to do things it simply cannot undertake because it does not have the funds. There has also been the handicap of inadequate space. Dr. Brodman asked if a main objective was to do more of the same kind of activities. Dr. Mumford replied that the program, of course, is constantly changing; there is room for more of the same types of activities and there are new needs always arising. For instance, it may be desirable to consider the establishment of regional repositories to make it easier for people throughout the country to obtain materials. Mrs. Gallagher asked about the cost of pushing forward more rapidly with the development of a classification schedule for law, including foreign law. Dr. Mumford indicated that estimated cost figures could be given. The development and application of the law classification could have been completed much sooner, Mr. Clapp added, if more funds had been available to L C for this purpose. Dr. Mumford stressed again that the Library can be helped if the Commission should endorse it as the national library and recommend that it be so recognized and funded to perform more of the services other libraries need. L C had already done a great deal that benefits other libraries, but there is more it can do.

Dr. Hubbard wondered how best to assure getting the needed funds, inasmuch as the Congress is reluctant to augment the Legislative budget. Dr. Mumford felt that a broad statement to the effect that LC is empowered to perform functions appropriate for the national library would assist in getting the necessary funds. Mr. Clapp referred to the fact that the Library makes its requests directly to the subcommittees of the House and Senate Appropriations Committees, and Dr. Mumford mentioned that today there is less reluctance to see Library appropriations increase.

Dr. Wright suggested, and Dr. Knight agreed, that it might be helpful if the Librarian wished to submit a paper on his vision of the Library of Congress as a National Library. Dr. Knight asked also how much resistance might be expected to the idea of augmenting the Library's national functions. Dr. Mumford spoke of the pride the Congress has in the Library's present national functions as well as in the Library's work for the Congress. It is difficult to make an estimate on resistance: there is a good deal of strong sentiment in the Congress for the Library and its national role.

Mr. Greenaway spoke of the possibility of establishing other branches of the national library in strategic places outside the United States to make our resources available more widely throughout the world. Dr. Mumford indicated that this idea has not yet been pursued; there might be some problem of impinging on functions of USIA libraries abroad. It seems more appropriate to concentrate first on strengthening our national programs before asking for authority to go abroad.

Mrs. Wallace asked about the difficulty of getting appropriations under the Legislative Branch as compared with the experience of Executive agencies such as HEW. Dr. Mumford did not believe that the Library of Congress should be part of the Executive Branch. There are many reasons why the Library should remain in the legislative branch, including the fact that the Library submits its requests directly to the Congress. There is also the important tradition of pride which the Congress had in the Library.

Mr. Lacy agreed that the matter of placement in the Governmental structure is an academic question. The Library of Congress is in the Legislative Branch. There are already a number of programs carried on by the Library with funds transferred from the Executive, and if the Government interested itself more vigorously in support of research resources, the initiative for more L C participation would undoubtedly come from Executive agencies. Thus, the pattern of transferred funds is central to a lot of these issues. The Commission will be interested particularly in programs funded through Executive agencies in which L C ought to have a central role. Sources of transferred funds and information about how this looks to L C will be illuminating. (See Appendix A).

The Presentations of some of L C's important programs then followed.

Mr. William J. Welsh, Acting Director, Processing Department

Mr. Welsh spoke on the Library's National Program for Acquisitions and Cataloging. The Higher Education Act of 1965 (P.L. 89-239, Title II, Part C) gave the Librarian of Congress responsibility for acquiring, insofar as possible, all library materials currently published throughout the world that are of value to scholarship, for cataloging them promptly after receipt, and for distributing bibliographic information through printed cards and by other means. The Association of Research Libraries urged that this provision be included in the Act in order that research libraries might benefit from more centralized cataloging. Mr. Cronin, Director, Processing Department, developed the idea of making use of the descriptions of publications listed in the national bibliographies of England, France, Germany, Norway, and Austria and of other countries where adequate bibliographies exist. L C's first office under this program was established in April, 1966, in London; arrangements were made for L C to receive from the British National Bibliography advance printer's copy of ENB entries; a London bookseller began supplying L C with current British imprints through a combination of blanket-order selections supplemented by selections from L C's recommending officers. The first catalog cards prepared under this international shared cataloging program were printed and distributed in the spring of 1966.

Acquisitions centers have now been established in Wiesbaden, Vienna, Paris, and Oslo along the lines of the London office. The Oslo office is to acquire and catalog publications from Denmark, and Sweden as well as from Norway, and the Paris and Wiesbaden offices will handle Swiss publications. An acquisitions center in Nairobi, Kenya was established in July 1966, and a procurement office in Rio de Janeiro, Brazil, began operating in September. An office covering Belgium and the Netherlands is expected to be established soon. A combined Shared Cataloging-Public Law 480 program is beginning in Yugoslavia. The Library hopes another will be authorized in Poland. There are some prospects for one in the Soviet Union.

LC accepts the cataloging entry it receives from the national bibliographies and makes very little change. The entry arrives in Washington by air with the book. LC adds subject headings and classification. A separate division has been set up to handle this material; the cataloging is completed quickly and printed cards distributed. The effect of the program, which has been in actual operation for less than one year, has been significant. Research libraries are now receiving about 75 percent of their cataloging copy from LC rather than the former 50 percent. This has been achieved despite inadequate funding; \$3,000,000 was made available on May 25, 1966; for the present year the program received \$3,000,000 rather than the authorized amount of over \$6,000,000. LC asked for full funding, \$7,700,000, for fiscal 1968, but HEW asked for \$4,000,000. The Librarian of Congress testified in support of full funding, and this is needed in order to move forward rapidly and cover a larger part of the world. With additional funds LC hopes to be able to set up an office in Tokyo to work with the National Diet Library and to have programs in Spain, Italy, and Portugal. Problems of recruiting staff and the limitation of funds are the constraints on this activity.

The Librarian of Congress has requested that Title II be amended to broaden the scope of the program. These amendments would authorize LC (1) to acquire a second copy of materials acquired under this program to enable placement of one copy in the Center for Research Libraries for loan purposes; (2) to serve as the acquisitions agent for college and research libraries in areas where the book trade is underdeveloped; and (3) to prepare and print bibliographic information in the form of guides, lists, and indexes, as well as on cards or tapes.

Another major acquisitions program is carried on under the Agricultural Trade Development and Assistance Act (Public Law 83-480), as amended, which permits the use of U. S. owned foreign currencies for this purpose. Under this program the Library is acquiring publications from India, Pakistan, Nepal, Ceylon, Indonesia, Israel, the United Arab Republic, and Yugoslavia. Since January 1962, some 6,000,000 publications (both in English and in foreign languages) have been shipped to American libraries and research centers in each of the fifty states. Funds have been requested to extend the program to Tunis, and a larger part of the world could be covered if funds were available. Coverage of Bulgaria, Czechoslovakia, and Hungary would be desirable, for example.

Mr. Welsh spoke of the growth of the Library's catalog card distribution program, which began in 1901; in fiscal 1966 some 19,000 libraries purchased over 63,000,000 L C printed catalog cards. L C's cataloging is also made available through publication of book catalogs. The National Union Catalog now goes to more than 1700 domestic and foreign libraries and is becoming more and more an international bibliography of materials of research value. Work is underway in the editing and publication of the pre-1956 NUC, which had heretofore been available only in card form at L C.

The Union List of Serials in Libraries of the United States and Canada, published by L C in 1966, gives the location of over 156,000 periodicals and other serial publications in nearly 1,000 North American libraries. This record is kept current by the continuing publication of New Serial Titles. In an effort to assure more adequate control over serial publications L C has agreed to build on its present broad data base a national inventory of serials (the "Serials Data Program"), provided that the coverage includes the humanities and social sciences as well as science and technology, that other libraries (especially NAL and NLM) cooperate fully, and that adequate funding can be assured for development of the additional data base, the systems design, and necessary system testing.

Other publications of a bibliographical character include subject lists of books added to L C's collections, publications available in microfilm or other forms of microreproduction, materials, received from the U.S.S.R. by L C and nearly 400 other American libraries, lists of subject headings, and classification schedules.

Mr. Welsh observed that "The world-wide acquisitions program, the superb collections, the unequalled catalogs, the card-distribution service, and the variety and comprehensiveness of its current technical publications, together with the prestige and respect with which the Library of Congress is regarded nationally and internationally, make it unique among American libraries as the national bibliographical center."

Mr. Welsh spoke further about the efforts of the Joint Committee on the Union List of Serials to get funds for the Serials Data Program, the efforts going forward to get more complete coverage of Federal Government publications, the need to pursue vigorously completion of the classification of law (Class K), the additional bibliographical tools needed by the Library of Congress and other research libraries (such as a consolidated index to L C classification and a subject heading manual). In connection with the automation effort, L C would like to publish its author and subject authority files and to mechanize the card-distribution service. A Technical Processes Research Office has been established this year; it is concerned with a thorough re-examination of what L C is now doing and what further technical bibliographic tools should be produced, and the problem of indexing in depth.

Dr. Hubbard asked about L C's relation to GPO in handling photocomposition from computer tape. Does L C have this capability within its own walls? Mr. Welsh explained that L C had worked with GPO in publishing by computer the seventh edition of its subject headings. GPO does the printing of all L C's catalog cards.

Dr. Overhage inquired about plans for getting more Government documents and controls over science and technology documents. Would L C expand the number of catalog listings? The immediate problem, Mr. Welsh responded, is to find out more about the extent of additional documents and then face up to the problem of the GPO monthly catalog or a special bibliographical service perhaps in L C. Mr. Clapp asked who makes the decision as to what portion of the GPO documents receive printed cards. It was explained that this decision is made in the Card Division. Mr. Welsh added that some other bibliographical tool may be more useful than printed cards for serial publications. This problem has not yet been fully resolved.

Mr. Lacy was interested in prospects for possible revival of the cataloging-in-source project. Mr. Welsh answered that there were no present plans for this.

Mrs. Wallace saw the Library's problems as breaking down largely into two categories--money and manpower. Dr. Mumford agreed that a doubling of the Library's present budget would provide funds that could be utilized very advantageously.

The problem of staffing for the enlarged cataloging program was discussed; LC has tried borrowing catalogers from other libraries; it has set up an internal training program; there is still a need for skilled catalogers.

Dr. Knight felt this list of unsolved problems would be helpful to the Commission. It is of value to know what progress has been made, what problems have been partially solved, what ones are most in need of help in finding the right solutions. (See Appendix B).

Mr. Paul R. Reimers, Coordinator, Information Systems

The automation program was reviewed by Mr. Reimers. LC's increasing number of cooperative programs with other libraries and the growing complexity of interrelationships among disciplines has necessitated studies of the possibilities of an automated system for the central bibliographic apparatus. Such a system "must be able to solve tomorrow's problems as well as today's, and with tomorrow's equipment."

Mr. Reimers then outlined the various steps taken by the Librarian: (1) the 1961 study by a survey team headed by Gilbert King, under a grant from the Council on Library Resources, Inc., and publication of its report, which found that automation of the central bibliographic apparatus was not only possible but also feasible and recommended that the Librarian contract for the development of a system; (2) the establishment of the Information Systems Office as part of the Office of the Librarian to carry out this recommendation; (3) the contract for a 7-phase study of the automation of the central bibliographic apparatus (now in its third phase); (4) the initiation and development of the pilot Project MARC by which a standard machine-readable record of bibliographic information was created for use within LC and for distribution to a selected number of libraries

(this initial study was also supported by the Council on Library Resources, Inc.) Other efforts include certain automated procedures for the control of manuscript collections, definition of tasks directed toward automation of some parts of the work of the Legislative Reference Service, and plans for wider use of automation of the Library of Congress has been to use machines to improve those operations for which the Library is uniquely responsible. This means that attention has been directed to the bibliographic record--to how it is produced, to how it is distributed, and to how it is used. "

In responding to questions about the MARC project, Mr. Reimers explained that whereas the over-all systems study is necessarily theoretical, MARC is actually getting cataloging data on tape to 16 participating libraries. He emphasized the research that has to go forward in this area and the necessity of doing it at the Library of Congress. He stressed too that research money spent at LC tends to be emplied throughout the library community. He spoke of the British acceptance of the MARC format and the interest of other countries in this effort. By July 1968 LC hopes to be distributing LC cataloging data on magnetic tape just as it does printed cards. Mr. Welsh added, in response to a question, that not every title will be available by that date.

Questions brought out the following additional information. LC plans to continue distribution of the test tapes as long as funds are available because there is so much interest (about seventy-five other libraries want the tapes and LC is not yet able to supply them). LC feels an obligation to keep down costs of tapes for the libraries and therefore has not yet considered use of commercial processing centers. Transliteration poses a difficult problem. Thinking has been confined to the bibliographical entry rather than to the incorporation of any texts at this point.

Dr. Overhage spoke of experimentation that has been taking place looking toward national networks for transmission of full text as an expedited interlibrary loan procedure. This is still in the early stage, but experiments are going forward. He wondered whether LC planned to take the initiative toward development of networks of this kind or whether LC was content to have the initiative for that kind of transmission

come from outside. Dr. Mumford stated that L C would be interested in a national information transmission system, but it would have to be developed jointly with others. Dr. Overhage referred to the various organizational patterns discussed in the Office of Science and Technology's report dealing with possible organization of a national system for scientific and technological information. He would be interested in L C's aspirations in the development of such a system. Mr. Reimers explained that L C needs to be looking at the development of a network dealing with ideas; the Library of Congress is a potential reserve for many information centers--it could be an automated switching center to which libraries could turn to locate information either from the central store at L C or to be switched to another smaller center. Dr. Overhage pointed out the urgency of these questions--where should we look for the central initiative in formulation of these plans? Mr. Lorenz stated that this is one of the reasons why the idea of a permanent national commission on libraries is being mentioned more and more--such a commission has to take this initiative or designate the proper agency to do the job.

In response to questions about the sale of catalog information on tapes, Dr. Mumford stated that L C has asked for funds to continue the free distribution until it has a saleable product, after which it will have to begin charging for them. He is now examining the use other libraries make of them and how much value the tapes would be to them if they went out on a continuing basis and covered total cataloging output.

Mr. Clapp reviewed the development of some of the Library's services over the years; in 1901 L C announced that it would begin lending books on library loan. This was the first commitment on the part of a national agency to underwrite text access. Since that time, there has been continuing development of two principal functions--provision of bibliographic data about research materials and full text access. The Library had found the provision of bibliographic data to be particularly important and thus this has been a principal target through the years. This is the case also with other Federal libraries--the emphasis has been on bibliographic data rather than text access. Text access has had to be somewhat deferred. Although L C carries on a heavy interlibrary loan business, it is obvious that one library cannot provide total text access under present technological and legal conditions. Today there is more concern about concentration on text access, and this may well be a subject for an across-the-board planning organization. (See Appendix C).

Dr. Roy P Basler, Director, The Reference Department

Humanistic and Cultural Programs of the Library of Congress were reviewed briefly by Dr. Basler. He emphasized that all programs in the Reference Department are national in terms of service to the particular clientele for whom the program is designed. Many are international in that they provide professional tools for research to particular clientele in other countries. For instance, Latin American scholars rely heavily on L C's Handbook of Latin American Studies because there is no other comparable tool available to them. The National Union Catalog of Manuscript Collections and the Center for Coordination of Foreign Manuscript Copying are national in scope. The chamber music concerts and literary programs supported by endowments are made available to the nation through radio stations scattered across the country. In science and technology, which will be discussed later, the effort is to serve the research community throughout the United States to the extent that resources and funds permit.

Speculation about what the Library of Congress might undertake in the future is cooperation with and as a part of a national library system, as the center for organization, control, and dissemination of information about recorded knowledge of all kinds, is limitless. In addition to further expansion of its central acquisitions and cataloging programs, its automation program, and its materials preservation program, there might be developed or expanded bibliographic and information centers for science and technology, social sciences, arts and humanities, and for materials covering Hispanic America, Slavic and Central Europe, the Orient, Africa, Western Eurpoe, Australia, and the Pacific Islands, and, of course, the United States.

In addition, there might be developed national union catalogs, comparable to the National Union Catalog of Manuscript Collections, for recording, motion pictures and TV tapes, prints, photographs, and maps. Such materials seldom get into even the main catalogs of most libraries.

Any such centers or union catalogs might best operate as integral units of the Library of Congress, or in any event be best located at the Library of Congress. Any or all such centers would provide reference services and issue publications such as guides, directories, indexes, bibliographies, checklists, significant

monographs, and serials. Undesirable duplication and overlapping might best be avoided if the centers were administered by the Library of Congress in cooperation and collaboration with the various learned and scientific organizations that represent the research community at large, as well as in cooperation and collaboration with other Government agencies whose needs and interests are to be served.

One means of broadening the possibility of L C's national service to the private research community, Dr. Basler added, would be to extend the present practice of accepting funds for specific projects on contract to include non-Government as well as Government agencies. L C now performs several million dollars worth of projects for other Government agencies, varying from relatively small bibliographies and literature searches to some very large ones. It is considering the expansion of contract service to non-Government research, once the space problem is solved by construction of the Madison Memorial Building.

The basis for this broad speculation is the acknowledged fact that the Library of Congress has the most comprehensive collections in all fields of knowledge and perhaps the largest pool of technically competent and highly trained personnel with experience in bibliographic and information services.

The successful development of automation on a large scale would seem to lend further credibility to this comprehensive view.

Mrs. Wallace complimented Dr. Mumford and Dr. Basler on this outstanding program.

Dr. Overhage inquired about the rate of acquisition of videotape. Dr. Basler stated that it comes to L C through copyright; L C selects tapes of outstanding programs for addition to the collections. The national networks have given quite a number, but copyright is the principal source. There are limited funds for purchase. Dr. Overhage mentioned the cataloging problem. Dr. Basler explained that the motion picture films, the largest collection in the world, are cataloged by title. L C, like most other libraries, needs to have further control over this type of material. All films materials pose a control problem to libraries.

Dr. Schramm asked about collecting news video tape. Dr. Basler answered that L C has acquired a large collection of news films, and has from Japan and Germany a particularly large representation of documentaries seized in World War II; these are being put on safety film so they can be preserved. L C has asked the National Endowments for the Humanities and Arts to put into their stipulations that any important documentaries or artistic tapes produced be deposited with the Library of Congress for archival preservation. There has not yet been a response to this proposal. The Library is concerned that some of the most important documentary and artistic presentations are not being preserved except by their producers, and this does not assure permanent preservation. (See Appendix D).

Mr. Marvin W. McFarland, Chief, Science and Technology Division

Science and Related Activities were described by Mr. McFarland, who stressed the fact that one of the functions of the Library of Congress as a national library should be to serve as a truly national referral center for the whole range of informational and research materials, wherever they may be located throughout the country. The size and importance of the Library's holdings had been mentioned. More than twenty-five percent of the volumes in the Library's classified collections are in science and technology. In addition to these more than two million books, there are nearly 20,000 current scientific and technical journals and approximately a million technical reports. These science collections are the largest in the world. In some subject areas, such as aeronautics, they are preeminent, and in others, such as Soviet technical literature, they are exceedingly fine.

Mr. McFarland outlined the responsibilities of the Science and Technology Division for reference and bibliographic services in all fields of science and technology and for development of the Library's collections in these areas. He described the important collection of technical reports from Federal agencies with large research and development programs, such as the Department of Defense, Atomic Energy Commission, Federal Aviation Agency, and National Aeronautics and Space Administration and reports from the academic and industrial communities, as well as from government and private organizations abroad. In most instances, the Library does not catalog these, but relies upon the announcement, abstracting, and indexing services provided by the

issuing body. The need for more effective control over this important literature is recognized, and the Division is presently developing a control data program for technical reports, beginning with the construction of a technical reports series catalog in machine-readable form. LC is working as closely as it can with other groups in this effort; whatever it ultimately does with technical reports must be compatible with other handling systems.

The Division provides free reference and bibliographic service to the Congress, other Federal agencies, the scientific community, and the general public. A free literature searching service is offered to the industrial community. Anyone with the need for information and the money to pay for it can make use of this service, but it is intended to make the Library's collections more completely accessible to industry than the Library could afford without reimbursement. A specialized bibliographic service is also available to other Government agencies which reimburse the Library through transferred funds. These range from continuing projects, such as PERMAFROST, to day-to-day over-the-telephone service to a few scientists at the Goddard Space Center for very specialized information. Mr. McFarland spoke of the many millions of dollars spent by other agencies in the Library of Congress. To meet these important and changing needs the Library believes that its capabilities in science and technology must be of the highest order.

Mr. McFarland then related the development of the National Referral Center for Science and Technology, which is concerned with network information transfer. It attempts to discover, validate, and inventory all significant information resources in science and technology, to respond to inquiries with information on these resources, and to compile and publish directories of scientific and technical information resources. Some 16,000 information resources have been identified; about 8,000 of these have been validated and put into the system. Using these information resources, the Center provides a referral service by putting the inquirer in touch with the particular resource that can best fill his needs. The responses from users indicate that a large percentage are fully satisfied with the information received from the resource identified by the Center. Although still operating on a small scale (handling about 300 inquiries a month), LC has been approached by other Government agencies

about the possibility of the technique being applied for their purposes, with funds transferred to L C. The Center has demonstrated not only that its inventory of information resources and its referral services have utility but also that the techniques for the collection, processing, and transfer of this specialized information are sound enough to form the basis for an expanded activity. The Library believes that the Center merits continuation.

Agencies in the Executive Branch have relied heavily on the Library's resources. For many years the Library has performed large-scale bibliographic services with funds transferred from the Executive Branch. The Library's Aerospace Technology Division, for example, produces abstracts and technical reports based on Soviet and Mainland Chinese open literature for the Department of Defense on transferred funds. These products are also available to the public through the Federal Clearinghouse for Scientific and Technical Information, Department of Commerce. Mr. McFarland emphasized that the mutually beneficial relationship between L C and Executive Branch agencies is evidence of the fact that any problems arising from the separation of the Government into three branches can be overcome when there is the desire and the will to work together for the benefit of the total Government and the scientific community.

At this point, Dr. Mumford pointed up the close cooperation between the National Agricultural Library, and the National Library of Medicine, and the Library of Congress. The heads of the three national libraries work closely together; they have set up a task force to identify common problems and work toward finding solutions. L C and N L M, for instance, have arranged for L C to catalog and print cards for medical titles that N L M is purchasing in Great Britain. The national libraries are pursuing this type of cooperative effort at every level and intend to continue doing so.

There were questions about the size and scope of the Library's science staff. Mr. McFarland stated that funds appropriated to the Library currently support twenty-eight positions in the Science and Technology Division. Transferred funds and the fee service augment this basic staff, which now numbers about seventy-five. He stressed again that the heaviest traffic on the collections has resulted from the special projects supported by the Department of Defense. (See Appendix E).

In summing up the Library's presentations, Dr. Mumford emphasized the Library's continuing concern with the implications that the greatly expanded role of the Federal Government and developments in computer technology hold for the future of library and information services in all areas of knowledge. The Library of Congress, within the framework of its responsibilities to the Congress, to the library community at large, and to the many publics it serves, is committed to playing an appropriately central role in the planning and operation of the emerging national library and information network. "We believe that since every important reference and research library is, by definition and by inherent nature, a considerably more comprehensive information center than any of the activities to which this term is usually applied, the Library of Congress already stands at the focus of a large national information network. We maintain that the network is not something arbitrarily established by Federal fiat but has been developed over the years in direct response to very real and important cultural and sociological needs. The network is dynamic and organic, and cannot be ignored nor supplanted in the paper plans for a new network, whether the purview be limited to science and technology or extended to all knowledge.

"It is our position that information--knowledge, data, learning, however acquired or recorded--is a continuum. For the purposes of its management of handling, information is inseparable from the media in which it is found. We have noted that the ferment for a national information network plan has come from the scientific and technical community. No one denies the importance... of scientific and technical information. Science and technology, however, do not, to our thinking, constitute a definable and viable field out of which, or for which, a national library and information network can be constructed. Nor do we believe that a truly national library and information network, whether limited to science and technology or extended to all of knowledge, can be constructed solely by or solely within the Federal Government... more fundamental to success in establishing an effective... network than administration, or organizational structure, or areas of responsibility for subject coverage or for handling categories of information, is the development of a responsive flexible communications medium... the means for communicating throughout the system the informational record. The network problem is an access problem, and the access problem

is essentially a file problem. It is a problem, therefore, of what librarians... call bibliographical control--control of the record surrogate for the actual informational piece, the original informational package.

"For the ultimate national network, which of course must be envisioned as an automated system with fast response-time, even real-time capability, there is an overriding need to develop a kind of lingua franca, a standard record, as it were, that would probably be open-ended, multi-purpose, highly manipulable, and responsive to the wide variety of products and services the system must provide. Comparatively little, I believe, has been done that is central to the solution of the record problem as it relates to a system on the scale of a national network such as that often proposed.

"It is from this, the technical end, that we at the Library are approaching the network problem. It is, perhaps, an approach from afar; it is certainly slow work. Still, it is our belief and hope that, given the size and complexity of the collections and services of the Library of Congress, and the network relationships it has with the national and international library and information communities, a significant advance here would signal a significant step toward the kind of effective national information network we are all so anxious to see achieved."

Dr. Knight and other Members of the Commission thanked Dr. Mumford for this effective summation on the network problem and for the striking prospect presented of the Library's broad range of services. A sense of their complexity will be important in the Commission's final report. He thanked Dr. Mumford again for this opportunity for a close look at the national Library's program and plans.

Executive Session

The Library staff withdrew at 12:30 p. m. , and Dr. Knight arranged for two afternoon sessions (Commission Members to attend the session of their preference)--Committee A, to be chaired by Mr. Greenaway, to hear reports on the U. S. Book Exchange, ALA, and the Federal Library Committee;

Committee B, chaired by Dr. Hubbard, to hear reports on the Federal Dissemination of Scientific and Technical Literature from representatives of the Clearinghouse, NASA, AEC, DOD, and to hear a report from the Register of Copyrights on copy-right revision.

The Commission then adjourned the General Session and joined the Librarian of Congress and other officers of the Library for luncheon in the Library's Whittall Pavilion. Senator John Sherman Cooper of Kentucky met with the group there and in brief remarks following the luncheon expressed the Congress' interest in and awareness of the importance of the role and services of the Library of Congress in the total library and information dissemination program of the country.

Committee A

Committee A Assembled at 2:30 p.m., May 22, 1967, in the Woodrow Wilson Room, Library of Congress, Washington, D. C.

Commission Members present were:

Mr. Emerson Greenaway, Chairman
Mr. Carl Elliott
Mrs. Marian Gallagher
Mrs. Merlin Moore
Mrs. George Rodney Wallace
Dr. Stephen J. Wright

Also present were:

Dr. Daniel J. Reed, Deputy Director
National Advisory Commission on Libraries
Mrs. Marlene Morrissey, Executive Assistant to
the Librarian of Congress

Witnesses:

Miss Alice Ball, Executive Director,
United States Book Exchange
Miss Germaine Krettek, Associate Executive Director
American Library Association, and Director, A.L.A.
Washington Office

Mr. Edwin Castagna, Chairman, Legislation Committee
American Library Association
Mr. Paul Howard, Executive Secretary,
Federal Library Committee
Mr. Henry J. Gartland, Director of Libraries
Veterans Administration
Mr. Burton E. Lamkin, Chief, Library and Information
Retrieval Branch, Federal Aviation Administration

Interviews

Miss Alice Ball, Executive Director, United States Book Exchange

Miss Ball told of the growth of this cooperative activity, which receives publications from libraries and makes them available at cost of handling to other libraries. About two million publications are received annually; present distribution is some 600,000. The operation is totally fee supported, and plans are now being made for expansion of the activity in this country and in Canada. Miss Ball pointed out that the material received and redistributed is only ten percent of the total available annually and stressed that these are valuable, useful publications, books superseded by later editions and books unneeded by a library because they are outside its area of responsibility. In serials the availability is infinite. This is a great national resource that should not continue to be overlooked.

Miss Ball emphasized also the prevalence of exchange in librarianship--the contact exchanges between single libraries and the network exchanges whereby a group of libraries deal with each other. The exchanges of the Medical Library Association are examples of the latter. However, exchanges are expensive in terms of what is received from them. The surplus publications handling program of USBE has offered an economical method of redistributing publications and has made a valuable contribution to librarianship. USBE does not feel that other kinds of exchange should be subordinate to this; each has its place. Miss Ball suggested that Government libraries, especially those in the Washington area, might meet more of their needs through a more centralized handling of their surpluses.

Miss Ball also commented on the value of this operation to American foreign policy, to foreign libraries, and to helping American libraries in their need to acquire foreign publications for area study programs. All of these would benefit from a wider use of USBE abroad if adequate financing were available; USBE is not able to suggest a method now. At one time it had a contract with AID which supplied publications to a large number of foreign libraries. There is some possibility that this might be resumed on a smaller scale. USBE is working on the possibility of distributing selected publications to centers abroad which in turn would distribute to libraries abroad. USBE is interested too in other developments in this area, such as the International Book Institute. Miss Ball expressed serious concern about the Institute's plan to increase book donation programs, which are a bane to libraries, and she emphasized the importance of careful screening of materials.

Mr. Greenaway asked what would be most helpful to USBE in its publications distribution program. Miss Ball answered that arrangements to reach foreign libraries are needed. The self-supporting aspect is successful for domestic libraries, but many foreign libraries cannot pay the high fees. A long-range arrangement is necessary for seeing that surpluses, with unwanted items removed, are placed where they are needed and will be useful abroad. Mrs. Gallagher asked about the screening process, and Miss Ball explained that USBE has long experience in knowing what to discard. It is now paying to have discards taken away. Referring to the possibility of an international exchange center, Miss Ball said that USBE performs an important part of an exchange center's work, although at present it does not coordinate direct exchanges, carry on correspondence with foreign exchange centers, or do anything with treaty exchanges. L C has responsibility for the latter. The first two activities might be useful extensions of USBE. In responding to Dr. Wright's question about adequacy of fees, Miss Ball stated that USBE can handle the estimated volume of distribution to libraries in the U. S. and Canada and a certain percentage of foreign libraries on the present fee structure. Mrs. Gallagher suggested that libraries need more information about the mechanics of the program--the cost of filling in missing issues, etc. Miss Ball mentioned the availability of a brochure giving such information, and she promised to supply copies to

Commission Members. In closing she thanked the group for this opportunity to explain the USBE program, which could serve as an example of what is possible in cooperative library activities. (See Appendix G).

Miss Germaine Krettek, Associate Director, American Library Association and Director, A. L. A. Washington Office

ALA activities in connection with Federal library legislation were outlined by Miss Krettek. ALA's involvement in Federal legislative programs for libraries began some thirty years ago, with the result that Federal financial assistance to libraries has gone from nothing in 1936 to authorizations of \$1.4 billion in 1966, covering a three-to-five year period. Even with this progress, Miss Krettek emphasized that we really have not yet begun to meet the libraries' needs in education. She traced the long development leading to the present more affirmative legislative approach to meeting these needs and the growing recognition of the fact that if we are going to have economic development and quality education, there must be good library service on a national basis. She outlined major steps achieved--the first rural Library Services Act passed in 1956; extension of the Act in 1960; the Library Construction Act in 1963; the involvement of school library development under Title II of the Higher Education Act of 1965. In some cases funding has been delayed; until these programs reach their full authorization we cannot determine for certain the degree to which they will be able to accomplish their purposes. About ten percent of the library construction job has been done--it has been possible to move ahead on construction about as fast as the States have been able to plan for it. The outlook is promising for domestic programs involving education--libraries are being recognized as being basic to education, and there will be increased funding for their programs in the future. Miss Krettek emphasized the importance of getting the funds requested for fiscal 1968.

Mr. Greenaway asked about the most effective organization for the Federal program. Miss Krettek pointed out that in the Office of Education, where most of the library legislation is implemented, there is a recognition of the role of the library, but it is not seen as a unified, over-all function. This has caused considerable difficulty in implementation and national planning. For instance, no statistics for libraries are developed

in that Office; the statistics are in the Center for Educational Statistics. There is need for some professional library staff in the library building planning program or some established liaison between this and the other units. Library buildings should be planned in terms of resources and staff. The Office of Education has had trouble organizing its program. There is no over-all advisory committee to the Commissioner. Perhaps libraries should be dealt with in a separate unit at a high level so that total library development could be considered. There is need to find some way for close liaison among the various elements in the Office of Education. College library construction is presently in one unit, college library resources in another, training is in one unit, statistics and research in yet another unit--there is no over-all mechanism for planning together. A different channel, at a higher level, perhaps, needs to be found to assure good planning and liaison.

Miss Krettek spoke of library programs and problems in other Federal agencies--OEO's Head Start, pre-school program, requires children's books in large numbers and skilled school and children's librarians--no funds were allocated for libraries in OEO. The important library needs in connection with juvenile delinquency work in correctional institutions, requiring carefully selected materials, have not been met. The program for handicapped children places a burden on libraries. Each of these and other similar programs should include funding for library materials and personnel.

In response to further questions about Federal organization of responsibilities for library development, Miss Krettek indicated that the Office of Education or a library division in HEW is appropriate if properly organized. Because libraries are so closely allied to education, they should be tied to it. It would be very useful to have more unity than at present and there must be coordination of planning at the top level--pointing to the Commissioner or to the Secretary. Miss Krettek stressed that there is still much to be done to make everyone aware that other programs must include an element for libraries--"the library is an integral element of everything that happens. This has to be stressed at all levels--local, State, Federal." Mrs. Moore commented on the need for adequate library statistics. (See Appendix H; Attachments 1, 2, and 3).

Mr. Edwin Castagna, Chairman, Legislation Committee, American Library Association.

Mr. Castagna spoke on the future of Federal legislation from A. L. A.'s point of view. The Committee has seen as its primary responsibility the seeking of appropriations up to the full authorization of legislation already enacted. The next stage is to coordinate the various programs and effect cooperation between them. Bigness is not necessarily the only answer. Every community and public library meet the basic standards. Attention must be paid to automation and retrieval of information, but with the understanding that there will be continuing needs for traditional library services that cannot be met by electronic means. Sophisticated mechanized devices are not appropriate for all library purposes. This is why the experiments and pilot installations, like those undertaken by the Library of Congress, are very desirable.

Definite recommendations were presented by Mr. Castagna:

- a. There should be establishment of a permanent commission on libraries and information services, advising the Federal Government on national requirements and services.
- b. There should be designation of the Library of Congress as the national library, with authority and responsibility to perform those functions that are appropriate for a national library in the national interest.
- c. There should be a structured organization in the Office of Education to assure that library activities, instead of being fragmented, are united in one high-level unit with the head reporting directly to the Commissioner of Education.
- d. There should be full implementation of the Depository Act, by amendment to the law if necessary.
- e. Strengthening of State library agencies' leadership is crucial to State and national library programs as a whole. Federal funds should not be granted for purposes that are primarily the responsibility of the States, such as legislative archives.

Mr. Castagna felt State library agencies should be involved in varying degrees of library development. Title III represents a good step in this direction. There should be increased financial assistance for meeting library problems in metropolitan areas.

Discussion followed on preservation problems, especially of newspapers and valuable records (the important work of W. J. Barrow was mentioned), the need for more funds to strengthen State agencies (specific funds need to be designated for this purpose), the need to enlarge training programs, underwrite the education of library school students, and assist in the building of a corps of trained librarians to assume State leadership. Mr. Castagna felt the need for many more trained people and, as a possible alternative, the development of machines to do more of the things we are now doing by human energy. (See Appendix I; Attachment 1).

Mr. Paul Howard, Executive Secretary, The Federal Library Committee

The Federal Library Committee--its organization and its program were described by Mr. Howard. He stressed the tremendous resources held by Federal libraries. These could be more useful to the nation as a whole. The Federal Library Committee has been established by the Library of Congress with the cooperation of the Bureau of the Budget in an effort to coordinate work on Federal library problems and programs. For example, an FLC Task Force on Acquisitions and Correlations of Collections is developing a methodology for evaluating the different Federal library collections. Funds will be needed to make these evaluations.

Mr. Howard explained that the Federal Library Committee is not yet supported by Federal funds. The Council on Library Resources, Inc. has provided funds to support an Executive Secretary for three years. Mr. Howard outlined the organization of the FLC's work into Task Forces and explained the basic goals of the Committee.

In response to a question about the accessibility of Federal library collections to the general public, Mr. Howard referred to the 1892 Joint Resolution of Congress opening all

collections in Washington to students. However, some librarians do not have the staff to provide general service on the materials, and others are security collections and thus not generally available.

Mr. Howard reported that about 3400 librarians are employed in the Federal Government; about 900 of these are in the Library of Congress. There are some Federal libraries without professional staff.

Mr. Greenaway commented on the admirable goals of the Committee. These are: to consider policies and problems relating to Federal libraries; evaluate existing federal library programs and resources; determine the priorities among library issues requiring attention; examine the organization and policies for acquiring, preserving, and making information available; study the need for and potential of technological innovation in library practices; study library budgeting and staffing problems including the recruiting, education, training, and remuneration of librarians. Mr. Howard spoke of the progress being made by FLC in developing guidelines for the use of Federal administrators in developing their library programs.

There was discussion about the FLC's current interest in helping to establish a better relationship between libraries and information centers. CSC has issued new standards for library personnel and technical information specialists and has attempted to define the relationship that should exist between them. Both are needed--the librarian to handle the information and know the material and the information specialist to know the subject. A new FLC task force is being organized to deal with this problem.

Mr. Greenaway asked about FLC's concern about the overlapping of functions and services within Federal libraries and the extent to which more cooperation could be achieved. Mr. Howard said this was one of the Committee's basic purposes.

As to the cooperation between the three national libraries, this is outside the scope of the Committee, but the FLC is encouraging such cooperation. FLC needs to see that this cooperation extends to the other 2000 Federal libraries and that they can benefit from the research and developments that are being carried on in the three national libraries. There

are many other Federal libraries the Committee has not yet been able to count. These include recreational libraries which should not be underestimated because in the military service such facilities support college level studies of military personnel.

Henry J. Gartland, Director of Libraries, Veterans Administration and Burton E. Lamkin, Chief, Library and Information Retrieval Branch, Federal Aviation Administration gave supporting statements on behalf of the Federal Library Committee. Both testified to the value and usefulness of the FLC and the hope that funds will be made available to strengthen and extend its activities. Mr. Gartland answered questions about VA libraries and Mr. Lamkin responded to questions about the library and information retrieval program in FAA, stressing the distinction that is made between the user of information and the mechanics for the flow of information. The scientists are the users; the development of standards to determine the mechanics comes from the librarians. Both Mr. Gartland and Mr. Lamkin emphasized the fact that the library is involved in most activities and functions of an agency. FLC is working under a handicap because it does not have as many resources as COSATI. It has to depend almost entirely on its members, who have many other responsibilities. Mr. Gartland and Mr. Lamkin joined Mr. Howard in urging that the FLC have the high level of support that it merits. (See Appendix J; Attachments 1 and 2).

Committee B

Committee B was convened at 2:37 p.m. on Monday, May 22, in Room 112, the Deputy Librarian's Office, Library of Congress, Washington, D.C., Dr. William N. Hubbard, Jr., presiding.

Commission members present were:

Dr. Estelle Brodman
Mr. Verner W. Clapp
Dr. Herman H. Fussler
Mr. Dan M. Lacy
Dr. Carl F. J. Overhage
Dr. Wilbur L. Schramm
Dr. William N. Hubbard (Chairman)

Also present were:

Mr. Melville J. Ruggles, Executive Director
National Advisory Commission on Libraries
Mr. John G. Lorenz, Deputy Librarian of Congress
Mrs. Elizabeth Hamer, Assistant Librarian,
Library of Congress
Mr. John Sherrod, Assistant Director,
Systems Development, Division of Technical
Information, Atomic Energy Commission
Mrs. Jeanne Hines, Reporter

Witnesses:

Mr. Hubert E. Sauter, Deputy Director, Clearinghouse
of Federal, Scientific and Technical Information
Mr. Melvin S. Day, Deputy Assistant Administrator,
Office of Technical Utilization, N.A.S.A.
Mr. Edward J. Brunenkant, Director, Division of
Technical Information, U. S. Atomic Energy Commission
Mr. Walter C. Christensen, Staff Assistant for Scientific
Information, Department of Defense
Mr. Abraham L. Kaminstein, Register of Copyright,
Library of Congress

Interviews

The Chairman opened the meeting by observing that in view of the many problems involved in the responsibility for federal dissemination of scientific and technical literature, he would turn directly to the expert witnesses.

Mr. Hubert E. Sauter, Deputy Director, Clearinghouse for Scientific and Technical Information

Mr. Sauter showed slides illustrating the basic programs of the Clearinghouse and how they relate to those of the AEC, NASA and other government agencies. The Clearinghouse deals primarily with technical report literature in the fields of physical science, engineering, and related technology. It is currently moving into the social sciences as well. It serves

as a central point of service in the federal government for industry, the technical public, academic and research institutes who do not have contracts or other working relationships with mission-oriented agencies.

The Clearinghouse began in 1945 when President Truman signed two Executive Orders dealing with: (1) A review of the classified literature generated by the defense community to determine what could be made publicly available, and (2) Making available to American industry information captured from the enemy during World War II. This led in 1950 to the passage of PL 776 giving the Secretary of Commerce responsibility for making available to the general public the results of Government-sponsored research. Technical reports are supplied by NASA, the AEC, the Department of Interior, Commerce, Defense and other government agencies; the Clearinghouse processes them and provides them to industry and other contracting parties.

Asked to compare the operation of the Clearinghouse with similar services provided by the three National Libraries, Mr. Sauter observed that the Clearinghouse limits its services to specified contraction organizations while the National Libraries provide information to the public at large. Pursuing this, Mr. Clapp noted that the National Libraries draw their materials from a great variety of sources both official and unofficial and are much less restricted in their dissemination. Moreover, the Clearinghouse is really a kind of publication organization, making available otherwise unpublished reports.

Some discussion followed as to the differences between the Library of Congress and the other two national libraries, especially regarding their clearinghouse functions. The Chairman asked for clarification from Mr. Lorenz, who said LC makes its report literature available on the same basis as NLM and the NAL and, therefore, on that basis should be considered like them. Dr. Fussler pointed out, however, that NAL and NLM were generating elaborate bibliographic apparatuses for their particular subject areas which LC was not doing. But in terms of access through interlibrary loan or photocopy, LC makes its material available on the same basis as the other two national libraries.

Asked how L C's collections in science and technology compare to those of the Clearinghouse, Mr. Sauter pointed out that the Clearinghouse deals with technical report literature, essentially unpublished, primarily U.S. reports, not books, journals, serials or monographs.

Dr. Brodman suggested that there were three basic differences: (1) L C collects report literature from sources other than federal agencies, (2) It provides more bibliographic detail than the Clearinghouse (this statement was questioned), and (3) It serves an unlimited public. Mr. Sauter pointed out in addition the broad range of subject areas with which the Library of Congress is concerned.

Mr. Sauter said the Clearinghouse receives reports from the NSF. It is also receiving an increasing number of foreign technical reports (through DOD, NASA, etc.). Reports of contractors working under government sponsorship, which may represent as much as 90% of the collections, are treated in the same way as U. S. Government reports.

Clearinghouse processing involves cataloging, abstracting, indexing, announcing, stocking and distribution. Where possible, the Clearinghouse makes use of bibliographic data supplied by the originating agency, some in machine readable form. Acquisitions are announced through publication of a number of journals and services, some of general interest, others tailored to fit the needs of a particular subscriber.

Clearinghouse services are not free. The format of the material has been changed to conform to the desires of the contracting subscribers. Unless multiple copies have been received, documents are reproduced for distribution. Approximately 50,000 reports are added each year, and roughly 1,000,000 requests are processed. The bulk of distribution is paper copy (mostly reproduced) though about 300,000 microfiche are sold yearly.

Mr. Sauter described an innovation which has cut the number of steps required to fill a request from seven to four. This is a unit price coupon system. Coupons serve as payment form, accounting record and mailing label. Using this system, an order can be fully processed in two days. With certain exceptions, such as subscriptions, prices are standardized.

The total operating budget of the Clearinghouse is about 4-1/2 million dollars, derived from the sale of documents, work done for other agencies, and an appropriation of roughly \$1,100,000.

Due to time pressures, questions were reserved for later.

Mr. Melvin S. Day, Deputy Assistant Administrator of the Office of Technical Information, NASA

Mr. Day opened his remarks by stating that NASA's top management feels its final product is knowledge; as a result NASA has a large information program. Being a mission agency, that program is primarily oriented toward the needs of NASA's technical personnel, but NASA policy is to make its information equally available to the public wherever possible.

The responsibilities of the Scientific and Technical Information Division are two-fold: (1) To acquire, process and make available the results of the agency's R&D programs for use both within and without agency, and (2) To acquire all aerospace information thought to be of value in the technical programs, regardless of source, put it under bibliographic control and make it available on an automatic basis, if possible.

Material handled by the Division is in one of two forms: R&D reports or articles in learned journals. NASA R&D reports are distributed widely to L C, most large public libraries in the country, the 10 federal regional report reference centers, a large number of universities, the Clearinghouse, etc.

All output from the agency's own programs becomes input into the bibliographical system of the agency. In addition, NASA attempts to acquire all material, both published and unpublished, in the aerospace area.

The processing of material in the NASA bibliographic program is done under two contracts. Published literature is handled by the American Institute of Aeronautics and Astronautics and unpublished literature (report literature) is handled by Documentation, Incorporated of College Park, Maryland.

The agency publishes semi-monthly an announcement journal called Scientific and Technical Aerospace Reports. Titles are listed in 34 categories and each issue has four indexes (subject, personal author, corporate author, report number) which are cumulated on a quarterly and an annual basis. The journal is produced by computer; the bibliography is photocomposed, prepared on a photon driven by a computer tape. The indexes are prepared on NLM's GRACE equipment.

NASA is largely decentralized. Though there is a large processing center in Washington, materials must be made accessible to researchers in the field. Accordingly the full texts of all reports listed are reproduced in microfiche.

All bibliographic information is fed into a computer system; the agency makes available to its centers and a number of its large contractors storage and retrieval tapes which are updated every two weeks. About 25 to 30% of incoming material originates with DOD and to avoid duplicate processing NASA uses DOD master tapes.

The agency also has had an SDI program (Selective Dissemination and Information) in which it matches the bibliographic tapes against profiles of research interests of NASA personnel producing individualized announcement lists. This program, however, is currently being modified from custom-made to standard profiles as an economy measure, the standard profile program costing only 1/10 as much as the custom.

The agency produces 8 to 9 million microfiche, which are distributed directly to NASA centers, contractors and sub-contractors about a week before the current list appears. These are made available to the general public through the Clearinghouse of Federal Scientific and Technical Information. NASA works closely with other government agencies, primarily the AEC and DOD, and all are attempting wherever possible to standardize the processing of their materials to further facilitate the exchange of information.

In response to a question by Dr. Overhage, Mr. Day stated that all material in stock is put on microfiche if possible. This amounts currently to about half the material listed in the International Aerospace Abstracts (IAA), material which originates in countries not signatory to the Geneva Copyright Convention or in organizations which have given permission to IAA to reproduce their material in microfiche form. (See Appendix K).

Mr. Edward J. Brunenkant, Director of the Division of Technical Information, Atomic Energy Commission

Mr. Brunenkant began his remarks by introducing Mr. John Sherrod, Assistant Director for Systems Development, Division of Technical Information, AEC, who serves on many library committees.

Mr. Brunenkant noted that the AEC is small (less than 7,000 employees) compared to other bodies such as the Department of Defense, and itself carries on very few operations. He mentioned two laboratories actually run by the AEC, but explained that most AEC activities are carried on by contractors; its national laboratories are usually operated by university groups.

Turning to the information program, Mr. Brunenkant asserted that the AEC statute is unusual in that it says in essence that information shall be used in such fashion as to contribute to industrial and scientific progress, public understanding and public welfare. He characterized the resulting information program as having four elements:

- (1) Informal communication. The AEC supports numerous conferences in specialized fields all around the world.
- (2) Primary. The AEC publishes books and journals.
- (3) Abstracting and Indexing of materials in its subject field.
- (4) Public understanding. A program designed to educate the layman through exhibits, science lectures, and brochures. Mr. Brunenkant observed that translation of scientific material into terms understandable to the general secondary school population is one of the most difficult tasks his staff has tried to undertake. He then distributed examples of these brochures to Commission members.

The AEC publishes its reports on standard microfiche and distributes them directly to its contractors and to the Clearinghouse. It supports but does not directly operate a number of information centers. Mr. Brunenkant then displayed two directories of AEC supported information centers and promised to supply each member of the Commission with a full set of materials. He also exhibited a list of AEC books, technical tools and monographs published over the last 10 years.

The AEC is a major scientific and technical publisher. Unlike most government agencies it publishes its books commercially; the publisher gets a copyright, the AEC collects royalties. But it is less interested in making money than in disseminating scientific and technical information which arises from its programs.

Mr. Brunenkant then showed slides, beginning with a view of the Science Demonstration Center, an inflatable building about the size of a football field, which the AEC takes overseas to house its public information programs. He proceeded to detail other exhibition and lecture programs, both current and projected.

Other slides illustrated various points--the growth in demand for educational literature in the field, a breakdown of the Abstracting & Indexing service showing physics to be the highest area of interest to the AEC and interrelationships of federal information services. The AEC is trying to establish an international nuclear information system. About 50% of relevant nuclear science documents originate abroad. A chart illustrating why the AEC is giving up manual bibliographic control in favor of a computer-based system was shown. In the atomic energy field the U. S. has so far been bearing the burden of the world's information system, but has now asked its contributing partners to pay for securing, scanning, abstracting and reducing to compatible machine form all their literature in this field and to provide that information in English in machine-readable form to this country for merger in our computer-based system. Currently participating are the U.K., the Scandinavian countries, Japan and Canada, while Australia has indicated interest.

The AEC has approximately 100 depository libraries in this country and 100 overseas. As an information resource the AEC feels these depositories are not fully effective; if there is to be a government depository system for documents it should include all federal agencies.

For its library network the AEC is experimenting with centralized procurement for decentralized shipment. It feels the mass distribution system for book procurement in this country is both wasteful and inefficient, that systems can be devised in cooperation with the major publishers to provide infinitely more effective distribution and accounting systems, and it plans a major experiment in this field. In another problem area the AEC library community might centralize or warehouse material which is not useful on a regular basis.

The Chairman thanked Mr. Brunenkant, and since Mr. Kaminstein had to leave early, asked him to proceed with his presentation, which would be followed by a colloquium period, after which they would hear from Mr. Christensen.

Mr. Abraham L. Kaminstein, Register of Copyright, The Library of Congress

Mr. Kaminstein opened his remarks by stating that he would give only a brief outline and allow time for questions. He traced the legislative history of the copyright bill from the revision beginning in 1955, through the hearings in 1965, the 51 executive sessions in 1966, to its approval by the House of Representatives. Sometimes referred to as the "juke box" or "computer" bill, the proposed copyright act is of much broader scope than such a nickname would imply.

Mr. Kaminstein noted that the House had recognized it had very little information on the effects on copyright of recent technological developments such as computers, but in view of their profound future impact on authorship, communication, and human life, the House felt the statute should be general in terms and broad enough to allow for adjustment to future changes. The Committee had so far tried only to apply the general principles of copyright law to the computer situation. However, at the close of the executive sessions the acting chairman of the Committee had written Mr. Kaminstein suggesting the subject was of such importance that it should be explored as soon as possible, without waiting for passage of the bill.

The Senate has completed its open hearings and has scheduled one day for government witnesses on the computer issue. After that, the Committee must wrestle with the impact

of the copyright law on CATV (Community antenna stations, which have sprung up all over the country), a vital and hotly contested issue; educational television also presents problems to be resolved, having to do with performance rights. Senator McClellan expects that the bill will not come before the Senate before next year.

There appears to be a general feeling that it will not be possible at this time to resolve the computer issue; to define "computer" in any meaningful way for purposes of this law has proved an obstacle. Both House and Senate are believed to be considering appointment of a governmental Commission with a life of 2 or 3 years to make specific recommendations. The present problem is the status of this aspect of the law during the moratorium period. Mr. Kaminstein thinks there will be room for wide experimentation.

As analogous to the computer situation, Mr. Kaminstein cited the problem of community antenna systems. Since the 1909 copyright law provided no clue to Congressional intent, the courts have had to resolve this issue. The House Committee in considering this problem came up with the following trichotomy: (1) A "White" area of no liability where CAT merely relays signals to areas not within range of the primary broadcaster, (2) An area where the community is not being fully served by the principal networks; here they propose compulsory licensing requiring a broadcaster to permit his signal to be used on payment of a reasonable fee to be determined by the court, and (3) A "Black" area in which CAT has been bringing in distant signals from a foreign market in competition with the networks. In this situation CAT would be required to bargain for all programs picked up and to pay what the market requires.

In closing, Mr. Kaminstein expressed his feeling that the computer issue should not be left to the courts, but should in time be put to Congress for careful study and recommendations.

The Chairman thanked Mr. Kaminstein for his helpful report on the status of the law.

Mr. Clapp asked the position of the Copyright Office on the proposal to establish a continuing Commission. Mr. Kaminstein replied that it has no objection; the idea is that the Copyright Office or a similar government agency have the power

to change the law as thinking moves from stage to stage; Congress, however, has resisted this plan. The Copyright Office has no expertise in the setting of rates; that requires a large agency with a staff of economists. Or it is possible to set up an appeal tribunal as in Canada, to fix a rate. There are numerous variations.

Replying to a question by Dr. Overhage, Mr. Kaminstein said both sides are nervous about a Commission life of more than 2 or 3 years, but the Commission (which is visualized as advisory to Congress) might come back to Congress to extend its life, if necessary.

Dr. Fussler asked if the Clearinghouse concept were adopted, would this supersede the concept of fair use in the class of material concerned, or be an adjunct? Mr. Kaminstein saw it as an adjunct; he said some educators have fought for some expression in the law on fair use; one possibility is a blanket license as in the performing rights area.

Dr. Overhage inquired how such legislation would affect copyright in countries with which we have reciprocal arrangements. Mr. Kaminstein thought it would have an impact, but that Europeans are not yet at the stage of considering computer usage, and what is done here will be a guideline for them; in some areas their concept of fair use may be wider than ours; their respect for protection of authors is greater than ours. He mentioned a diplomatic conference in Stockholm in 3 weeks which will consider revision of the International Berne Convention, of which we are not a member, but to which this bill will open the door.

Dr. Brodman noted that, aside from the computer section, librarians were most worried about length of copyright, fair use and face-to-face requirements of teaching. She asked: As to length of copyright (50 years beyond death of the author is the proposal) is it feasible for the Copyright Office to maintain these dates? As to fair use, is it going to be possible to make retention copies for scientists or scholars as in the past? And, what will be done about such things as closed circuit TV which a student may see in the library?

As to death date, Mr. Kaminstein replied that every other country in the world (except the developing countries, and the Philippines which took its lead from us) has a life plus term;

the Berne Convention specifies life plus 50 years. Since librarians presently have to ascertain from the Copyright Office whether renewal has taken place after expiration of the first 28-year term, life plus would be no greater burden; moreover, librarians would know the death dates of most prominent authors. There is a presumption in the statute enabling free use 75 years after publication though Mr. Kaminstein was uncertain as to its exact wording. Mr. Lacy observed that it is often more difficult to establish date of publication than an author's death date. However, Mr. Kaminstein did not want to underestimate the fact that it would be an additional burden for his office.

As to "fair use", under the proposed law the principle of fair use is unchanged from that in the present statute, but current practice in some libraries is probably illegal. As an example Mr. Kaminstein cited the mass production of Xerox copies for use by an entire class. This bill for the first time sets out guidelines of fair use, so librarians and educators will find it easier to interpret. Mr. Kaminstein felt that the setting of limits was a practical matter which could be agreed upon by all concerned.

The Chairman asked for clarification. Under the proposed guidelines would each of 30 students asking individually for a copy be fair use, while it would be illegal for a librarian to make 30 copies at one time for one class? Mr. Kaminstein pointed to a problem of actual danger to the publisher; in some medical, biological and other journals an entire issue might be devoted to a single lead article; this would not, he felt, fall into the same category as an article running only several pages. Some of these things must be left to good judgment and practice.

In the practical area of collecting damages, to the comment that libraries rarely have tangible assets, Mr. Lacy remarked that most libraries are owned by public bodies with limitless resources. Mr. Kaminstein said there was also a question as to whether it was possible to sue some public bodies; there may have to be test suits in some areas. He saw a real possibility of such suits if no law is enacted because abuse of reproduction rights has gotten out of hand.

Mr. Kaminstein had earlier mentioned Congressional interest in proposals regarding copyright Clearinghouses. Mr. Lacy observed that the discussion of Clearinghouses has always been on the assumption that ASCAP (American Society of Composers, Authors, and Publishers) would be the prototype. Citing successes of LC's Division of Services to the blind in negotiating with hundreds of proprietors for sweeping licenses under appropriate safeguards, he thought EDUCOM, ALA or the National Association of Broadcasters might similarly approach major proprietors of copyrights and gain quite broad concessions. He asked if attention had been given to consumer-owned as opposed to producer-owned clearinghouses? Mr. Kaminstein saw additional possibilities, such as clearinghouses run by both users and proprietors, or a clearinghouse with governmental participation to safeguard against possible antitrust abuses. Mr. Lacy doubted there would be an antitrust problem if such clearinghouses were consumer-oriented.

Mr. Kaminstein observed that unless negotiations concerning clearinghouses got under way in the private sector, there would soon be a governmental Commission looking into alternatives and trying to force the issue. Mr. Lacy observed that so far the onus had been primarily on the proprietor, and from the viewpoint of the consumer and public interest this was a mistake.

The Chairman invited the guests present to enter this discussion of copyright revision.

Mr. Christensen said he felt personally that the requirement to obtain copyright releases for technical information in particular is not compatible with the present-day needs of engineers and scientists for information. He said DOD didn't object to reimbursing authors or publishers a reasonable amount for use of their material but the difficulty lies in finding the copyright holders and in the disproportionate administrative costs of lengthy negotiations.

Mr. Kaminstein said he would rather see such money go into a Clearinghouse. Mr. Christensen agreed. He felt the need for some mechanism that would permit the use of technical information when needed, at the same time retrospectively rewarding the copyright owners. Mr. Day said his concern was

primarily in the computer area. NASA also supports compulsory licensing. As an agency it has no objection to paying. Mr. Kaminstein cautioned against underestimating the difficulties of the compulsory licensing provisions in the copyright or patent area.

Dr. Overhage asked the present position as to protection of computer programs by copyright. Mr. Kaminstein replied that the subject is currently before the Senate as it considers new patent legislation. The status of "programs" and the most appropriate way to protect them has still to be clarified.

Asked to distinguish between use and reproduction of a program, Mr. Kaminstein noted many problems. As an example he cited computer-generated programs which are not copyrightable because there is no human authorship. He also cited the example of a book describing an accounting system. A user of the system was sued for infringement of copyright. The Court held that the copyright protection was for the book or description of the system, not the system itself. These examples illustrate the great distinction between copyright and patent protection. A patent can prevent use of a system while a copyright can block only its publication.

On another subject, Mr. Brunenkant said the AEC would like to see government agencies given the right to copyright for several reasons. He mentioned specifically distribution and marketing difficulties with valuable government publications.

Though favoring compensation, the AEC is also concerned about the indefinite date provisions; Mr. Bruenenkant foresees formidable administrative problems. Mr. Kaminstein observed that in the sciences, information is often outdated in five or ten years. Mr. Brunenkant speculated that it would be difficult to separate scientific and technical from other information and Mr. Kaminstein agreed. Mr. Brunenkant saw no reason for treating economics, sociology, psychology, or the humanities differently from science and technology.

Mr. Kaminstein expressed regret that there was not time to discuss all these troubling questions.

Mr. Walter C. Christensen, Staff Assistant for Scientific Information,
Department of Defense

Mr. Christensen, on being assured that the Commission had received copies of his formal statement, said he would take a different tack from others present in that he would not describe in

detail the handling of document distribution by the Defense Department but would point out briefly some differences between DOD and other agencies. Since Defense has invested so heavily in Research and Development, he would limit his discussion to technical information.

The Defense Department has no statutory requirement insuring dissemination of technical data to the general public. Nevertheless, all unclassified, unlimited reports are deposited in the Department of Commerce Clearinghouse where they are made available to its public. Clearinghouse sales in 1966/67 will probably amount to some 458,000 reports of which 125,000 will be DOD reports.

DOD has 120 technical libraries with an operating cost exceeding \$14 million. Their future is a serious problem. Though historically they have been the keystone of the Department's technical information activities, today's requirements for more information, faster, have led to a reexamination of the usefulness of these libraries.

A recent user-need study revealed that scientists and engineers desire 20% of their technical information in less than one day, that over 40% of the technical information used is technical data (test reports, engineering drawings, etc. as opposed to technical books), and that engineers and scientists turn to libraries and other formal organized information services as a first source of information less than 10% of the time.

Mr. Christensen asserted that traditional libraries are incapable of fulfilling all these needs, that DOD's technical libraries are consequently in a transition phase, dealing in terms of information rather than documents, and that the personnel manning them must also change in character, exhibiting a greater degree of technical expertise. Defense currently employs people with both library and technical backgrounds. He felt the problem of appropriate technical libraries is only solvable by the agency concerned, since such libraries must meet the needs of specific user groups or go out of existence.

Mr. Christensen called attention to the revolutionary approach of 20 information analysis centers (listed in his statement) which meet user needs well, but are prohibitively expensive to

operate. Defense cannot hope to support such centers for every area of its interests but must rely instead on local information systems which he believes will be built around the technical library of the future.

The Defense Documentation Center in Alexandria, Virginia, provides secondary distribution of all DOD reports. Of some 50,000 technical reports issued annually, 40% have security classifications; others have limitations because of proprietary rights. Unclassified, unlimited reports are handled by the Commerce Clearinghouse under contract and are announced both in Clearinghouse publications and in the Defense Department's Technical Abstract Bulletin which is distributed throughout the Defense community, to other government agencies and to contractors.

Users of DDC are the Department itself, Defense contractors, other government agencies and their contractors, and potential contractors. Firms which do not currently have Defense or other government contracts can in certain circumstances gain access to DDC and to classified information. DDC services are free and therefore normally would be preferred by a contractor over those provided by the Clearinghouse. Defense estimates that in 1966/67 it will fill more than 1,500,000 requests for copies of DOD reports. In ordering, users may identify required documents in one of 3 ways: (1) by specifying by number a document listed in the Technical Abstract Bulletin, (2) by requesting a special search to provide a list of documents pertinent to a particular subject, or (3) by describing in general terms a document he believes to exist but for which he has no specific identifying data. Currently there are 3,210 DOD components registered for DDC services, 2,464 contractors, and 549 other government organizations.

Asked if Defense gives bibliographic as well as document retrieval service, Mr. Christensen replied in the affirmative, adding that use of such bibliographic service has increased in the past year, reflecting a better knowledge of its availability. Asked if there were a standard nomenclature by which the inquirer must address the system, the reply was no, that the inquiry could be made in natural language and the staff employs a thesaurus in making its search. Defense, jointly with the Engineers Joint Council, is getting out a new Department-wide thesaurus, termed "LEX", which will be offered for sale to the public and provided to all government agencies and their contractors.

Defense differs from some of the other programs described in that it handles much classified information. Another notable difference is the lack so far of a Selective Dissemination type program. Defense is currently looking at NASA's experience in this area and is prepared to begin on an experimental basis.

In an effort to investigate the importance of foreign technical reports to U.S. engineers and scientists, the DDC, in conjunction with the Clearinghouse, is establishing a program to accession foreign reports, announcing them (both untranslated and subsequently translated) and comparing activity with a corresponding group of U. S. reports. (See Appendix L).

The Chairman expressed the Commission's deep appreciation to Mr. Christensen and called for questions or comments.

Dr. Brodman asked about Mr. Christensen's background. Mr. Christensen explained that he was trained as a nuclear engineer, had worked as an electrical-electronics engineer, and subsequently became a nuclear physicist; before his present position he was technical director of the Army Nuclear Power Program for DOD and the AEC. He had spent a year on a Congressional fellowship, one of his assignments being to help establish a Science and Technology Subcommittee in the Senate Small Business Committee. One of its major projects was to look at the whole question of "technology spinoff"; he thus became engaged in a study of the technical information activities and technology utilization activities of all the government agencies and their relation to industry. Becoming interested in this problem, he undertook to work on it for a time with the Department of Defense.

Dr. Fussler then asked if the witnesses would respond individually or collectively to the question whether the division of labor among them seems rational, efficient and sensible? Is it meeting the public interest? He acknowledged that this is a complex, expensive system responding to urgent needs of contemporary society, but wondered if the structure is the best that might be devised.

Mr. Sauter thought the division of labor good except in the area of secondary distribution of documents. The primary initial distribution works well because each agency knows who is initially interested, but secondary distribution brings in the fringe people or casually interested and there one finds a good deal of

overlap. He felt this might be worked out as time goes on. The collection and processing of materials ought to be left to the different agencies because to assemble a staff to do the work centrally would be almost impossible without tapping valuable talent that is better dispersed elsewhere.

Mr. Clapp asked Mr. Brunenkant to explain what he had meant by the phrase "the library family". Mr. Brunenkant replied that he referred to the libraries at the AEC's 20 national laboratories such as Argonne and Oak Ridge. He then expressed surprise at Mr. Christensen's testimony that Defense runs 120 libraries for only \$14 million. In terms of AEC experience this figure appeared incredibly low. Mr. Day pointed out that he was talking only about DOD libraries themselves.

As to the use of libraries for technical information, Mr. Brunenkant said he fundamentally disagreed with Mr. Christensen, and felt that the entry point into future information systems is going to be the library or something that can be equated to it.

Asked if his libraries were used only for 10% of inquiries would he consider that something was wrong with the way they were organized, Mr. Brunenkant observed that the AEC didn't operate with such straight-line discipline as the DOD; AEC libraries are reasonably independent. He believes, however, that there is a problem in the library education program, in that the major library schools are oriented toward public libraries. Government needs the best-trained people it can get and its recruiting has been inept in regard to librarians. Mr. Christensen, expanding on his point, said he meant that libraries were consulted only 10% of the time as a first source of information; where personnel were unsuccessful in finding needed information in their local work environments, the percentage of library consultation goes up. He felt libraries could be much more effective and agreed with Mr. Brunenkant that the caliber and technical expertise of the people operating them must be improved. Increasingly, librarians must think in terms of information as opposed to documents.

In view of technical libraries being in process of change, and the great expense involved in maintaining information centers, Mr. Clapp asked if there weren't some compromise which would make the technical library more competent without incurring this great expense? Mr. Christensen could think of no other approach at present. Mr. Brunenkant observed that special libraries were less of a problem than the public library system.

Mr. Day asserted that libraries have a very important function in the total transfer of information. The question is not one of whether or not to have them, but of their place in handling the flow of information to scientists and engineers. Not to be underestimated is the importance of informal communication which is sometimes extremely effective. It has been possible to keep up to date in one's own field without relying on the formal literature sources, but as the bank of information increases, formal information systems become increasingly necessary, especially in keeping up with those areas of information which impinge on one's own. One cannot possibly keep up to date on everything, and this is where libraries and library systems serve a very important function.

The Chairman asked Mr. Day to discuss the proposed National Science Library in that context, taking into account the highly efficient linear system in such fields as medicine or engineering and its implications for a national information transfer system. If these linear systems are optimized, is it possible to develop the secondary transmission which is also a function that needs to be preserved? Is there a role for L C in a "cutting edge" information transfer?

Mr. Day said that with the exception of L C, most of the big information programs in government are mission-oriented. He thought as much of their output as possible should be made available to L C. He said that NASA's information system is not set up to service the general public. While they hope their products and services will be of value and use to the public, essentially it will be through other information organizations such as L C.

Mr. Brunenkant had a different view. While L C has undoubtedly the world's largest single collection in science and technology, he felt it had been singularly uninterested in serving science and technology--perhaps properly so in terms of its other burdens. The Chairman asked to what extent he referred to the problem of immediacy, where the need must be filled within the next 48 hours? Is the problem under discussion a choice of system where one wants to minimize the time between production and distribution of knowledge? Mr. Brunenkant considered that quick responsiveness to users needs would be more apt to come from people whose budgets, promotions, salaries, etc. are in close proximity to those they serve. In this respect L C is several steps removed from science and technology.

Mr. Day pointed out that in the area of science and technology we are becoming so specialized that each developing information organization is going into greater depth in respect to indexing, putting the material under control in a manner tailored to very specific needs. This is one reason why the information centers have multiplied--they take material coming from the major documentation organizations, as well as other material and index it in greater detail.

Mr. Brunenkant brought up the question of money. L C has not had the money to provide hand-tailored service. All systems must operate within restraints (budgetary, personnel, mission) but here we are talking literally in the tens of millions of dollars.

Dr. Fussler asked Mr. Day, since NASA is using contract services more extensively than perhaps anyone else in government for the generation of control, indexing and document access, if there is evidence that this is a cheap, efficient and desirable general pattern. Mr. Day said the NASA information program as it now exists was set up in 1962. The agency chose the contract route as more practical and flexible than a large in-house operation; cost falls within the same area as other large information systems. He then praised the system at the AEC.

On the subject of mutual availability and duplication, using the example of a British article on isotopes of possible interest to the AEC, DOD, and NASA, Mr. Lacy wondered who had responsibility for its acquisition. Mr. Brunenkant said duplication is sometimes cheaper than the sheer mechanical problem of matching holdings.

Asked if there has been agreement on tape format, content, etc., Mr. Day said this was being worked out through COSATI. In answer to Mr. Lacy's question, he said NASA would not pick up the item described but would rely on Nuclear Science Abstracts. For coverage in depth in the nuclear area, NASA uses Nuclear Science Abstracts; in the aerospace area it uses its own system. There may, however, be some overlap, nuclear reactors as propulsion vehicles, for example. Mr. Day saw the only answer in trying to bring the systems as close together as possible. As to standardization, he said that while it may be desirable from a cost standpoint, it decreases flexibility. More important is the building of cross-linkage between the systems.

Dr. Overhage asked about the acceptability of abstracting from one discipline or mission-oriented area to another. It has been said that each profession is going to have to do its own abstracting and indexing. Mr. Day cited the Herner Report* and Mr. Brunenkant thought it a question of economics.

Asked about progress in on-line consultation of computer memory, Mr. Day said NASA had contracted with the Bunker-Ramo Corporation and recently completed a test in which a man without previous information training was able to sit down and essentially interact with the bank of information itself. One of the big problems with large computer systems today is that as tapes are added the systems become more expensive. The big advantage of the on-line, direct access, time-shared system is that a man can interact with the bank of information and modify his queries as he proceeds, as in a card catalog. The consoles tested did not have hard copy printout, just Cathode Ray Tube display at this stage. There will be a report issued within the next 6 weeks.

Mr. Day added that NASA is also testing a data cell with Lockheed Aircraft, magnetic data cell storage being cheaper than disc or drum storage. NASA expects that future systems will combine the use of data cells, discs and drums, depending on type of information and frequency of need. The cell being tested in the IBM data cell and Mr. Day feels it will have a major impact on all NASA's programs and in many cases will cut down on the flow of paper.

There being no further questions or comments, the Chairman expressed the Commission's appreciation to all of the witnesses, reminded the members of the evening session, and adjourned the meeting at 5:20 p. m.

* Herner, Saul, "Subject Slanting and Scientific Abstracting Publications," Proceedings of the International Conference on Scientific Information. Washington, D. C., National Academy of Sciences, National Research Council, 1959. Vol. I, pp. 407-427.

Executive Session

The Commission was reconvened in Executive Session in the Scandinavian Room of the International Inn, Washington, D.C., at 8:05 p.m., May 22, 1967, Dr. Douglas M. Knight presiding.

Dr. Launor Carter's invitation to the Commission to spend Tuesday, June 27, in Santa Monica, to observe some of the work being done by the System Development Corporation, was discussed and tentatively accepted, assuming that suitable transportation arrangements could be made.

The Chairman reported that all but two of the studies originally planned by the Commission had now been arranged. Dr. Taylor Cole, with suitable assistance, has agreed to conduct the extremely complex governmental relationship study. He noted Dr. Cole's exceptional qualifications for such an undertaking; Dr. Cole is a distinguished political scientist, experienced in comparative government.

Schedule

The Commission then turned to a discussion of its schedule. In respect to the autumn and winter meetings, the Commission was asked to change from the fourth to the third Monday and Tuesday of each month in order to accomodate Dr. Burkhardt who reported a conflict of obligations. It was agreed that the Members would be circularized as to the possibility of making this change.

With respect to the most appropriate use of the summer months there was considerable discussion. The Chairman observed that at the previous meeting the Members had noted the difficulty of gathering the full Commission during July and August and had proposed that the time be used instead for regional hearings before small groups of Members, for continued work on the special studies, and for preparation of the initial rough draft of the report.

Noting that writing the report was going to take concentrated time, Mr. Greenaway suggested that at some sacrifice the Members might consider meeting in the summer, deciding to

specify a limit to the number of witnesses it would hear and meeting for periods of three to four days after which time the Commission could concentrate on internal discussion of the character of the final report. He proposed that the final witnesses be heard before Labor Day.

While sympathizing with the need to finish the testimony phase quickly, the Chairman thought the panel might wish to have additional distinguished guests. He called attention to the long list of potential witnesses proposed for the autumn. Dr. Brodman remarked that the testimony was becoming repetitious. The Chairman felt there might be resentment if certain authorities had no chance to appear and some specific cases were mentioned.

Mrs. Moore pointed out the preponderance of witnesses so far from certain large centers, and proposed that there be hearings in other parts of the country, such as Dallas, as broad support would be essential in having the Commission's report accepted. She suggested this might be done on a regional basis. Mrs. Moore, Mrs. Wallace and Mr. Elliott agreed.

Dr. Brodman and others felt the entire Commission need not assemble to take such testimony but that it could be handled by committees during the summer. Members indicated their willingness to give time to such hearings and there was general agreement about proceeding in this manner once details had been worked out. It was suggested that a correlation with meetings of the regional library associations might be convenient and effective. The Chairman asked Mrs. Moore to Chair a group consisting of herself, Mr. Elliott, Mr. Lacy and Mr. Greenaway to make specific recommendations as to location, time and number of such committee meetings.

Matters of public relations in respect to these meetings were then considered. It was felt that the library community could be notified through the library literature but that the Governors and congressional representatives in the areas should receive direct notification of the Commission's plans.

The Chairman agreed to clear this procedure with the White House, and to solicit suggestions there as to appropriate locations.

Returning to more long range planning, the Chairman introduced a procedural idea of Dr. Fussler's that after San Francisco the Commission taper off on official witnesses. Early in the fall, after the report had been drafted, he proposed inviting a few notable authorities from diverse fields to talk privately with the Commission about the details of the report.

This procedure would keep the initiative with the Commission but give it the benefit of thought and judgment of a kind different from that displayed at the hearings.

The Chairman reported that Dr. Frederick Wagman, of the University of Michigan Libraries, was assisting him and the Staff of the Commission on the review and distillation of ideas, not in any way preempting the work of the Commission but providing the services of a sympathetic outside expert. Dr. Wagman had agreed to participate in informal discussions to help analyze the range of problems, to note omissions, and to make suggestions upon reading the rough draft of the report.

This led Dr. Schramm to ask about the current status of the draft. The Chairman replied that a wealth of material had been collected but that progress so far was limited to the formulation of substantive ideas. He mentioned the recent clarification of certain matters relating to the Library of Congress which he felt was a substantial move towards completion. He proposed that the Staff, Dr. Wagman, some of the Commission Members as individuals, and himself write a rough draft in August. Although the special studies would not be completed by then, their general substance would be known. This draft would function as a working paper to be prepared by the Commission.

There was some feeling that this procedure was premature. Mrs. Wallace and Mrs. Moore felt that not enough had yet been heard from the "have nots" where library service was concerned. Several Members felt the Commission needed answers to the questions raised in Dr. Schramm's letter. It was suggested that the Commission might want to contract for an additional study in this area. Mr. Ruggles reported that at Dr. Eurich's suggestion he had already contacted Dr. Sidney Tickton of the Academy for Educational Development to do a study on use and non-use of libraries. Dr. Tickton had seen Dr. Schramm's paper and he and Dr. Schramm have discussed the matter, proposing to concentrate for practical reasons on the first three questions.

As to the summer procedure outlined, Dr. Schramm agreed that the move towards closure was perhaps too early. He observed that so far the Commission had heard librarians talk from the inside out and some time should be spent with people looking from the outside in, asking what place libraries are playing in this changing society. He saw libraries as sitting in the midst of a tremendous change in our habits of using and receiving information. He wanted time for discussion of where libraries will be ten years from now within the social structure.

Dr. Schramm also wondered if the first draft could be written before receipt of Dr. Burkhardt's Committee's report and at least some of the more important contracts. Dr. Fussler, considering the time schedule, felt a rough draft could not wait for Dr. Burkhardt's report. The Chairman indicated that the Commission was committed to submission of its report by the end of the year. Though the wording of the directive was agreed to be somewhat ambiguous, giving the Commission a life of ninety days into the next year, Mr. Clapp asserted that this was to leave time for Members to be called on to answer for their report. The Chairman agreed.

Mr. Lacy observed that until someone attempted actually writing, it would be difficult to see the questions that needed answers. Dr. Fussler thought a draft report, by the end of August, would be a great asset on the assumption that other data would be added and that the draft could be substantially modified. He felt that until the Members had a piece of paper to work with they would be very uneasy. This was what concerned the Chairman, who added that realizing the draft would be torn to ribbons, he felt he could not ask any of the others to undertake it.

Dr. Hubbard also expressed a definite need for a first approximation of the report, even in Roman outline form, to be circulated even before the August deadline. The Chairman explained that certain postulates were already on paper, but so far there had not been time to reconcile and relate them in preparation for debate on the different points. He promised to circulate an outline version of the draft as soon as possible to give time in the ensuing months for the Commission to "fight it out" together. In the meantime, he proposed circulating an inventory of major ideas, foci, possible solutions, to be used as a basis for discussion as early as the June meeting.

Noting Mr. Ruggles' reminder that the Commission had to decide at this meeting whom to hear in San Francisco, the Chairman suggested that the Members look over the proposed list and discuss possible deletions or additions the next day. Some discussion of specific possibilities followed, with the Chairman finally suggesting the possibility of cutting the San Francisco list to the bone to leave time to discuss the composite list of substantive concerns.

Mr. Greenaway felt that so far too many people had been talking about what exists, and not enough about what ought to exist. He hoped more of the Commission's time would now be devoted to witnesses with a sense of the future and its implications for libraries. Mr. Clapp and Mrs. Wallace agreed. Dr. Overhage observed that some time ago the Commission had assembled certain fundamental propositions which seemed important. Added to these was a rather provocative list which had been circulated subsequently. He would like to see the Commission get together, without witnesses, and start fresh with nothing else on the agenda to debate these propositions. After September the meetings should be devoted entirely to such debate since a great deal of time would be required to reach agreement.

Dr. Fussler still saw a need for witnesses outside the library establishment. He suggested McGeorge Bundy as an example of a person who might have strong views on how research information should be handled. If such persons were not heard Dr. Fussler felt the Commission might leave out very critical aspects in its report. Moreover he pointed to a problem in hearing witnesses in the same room simultaneously. He noted a committee had heard from all the science and technology people simultaneously that afternoon which had left the impression that the present structure was perfect. Had each witness been interviewed alone, he might have been more candid about imperfections in the structure. Dr. Fussler felt the possible time lost in repetition would be outweighed by the advantages of critical discussion.

Mr. Ruggles requested Commission advice, particularly from the librarians present, regarding the political importance of having representation from the library field among the witnesses. Noting that the Staff had tried to be both as representative and comprehensive as possible, he asked if the Commission were satisfied.

He mentioned Mrs. Moore's feeling that more testimony was needed "from the grass roots" and asked that the Members look carefully at the proposed list which would be discussed tomorrow, giving thought to possible omissions which might return to haunt them.

Mr. Greenaway replied that not enough had been heard from consumers; though he was glad to hear from colleagues in other disciplines, "the little man whose name is John Q. Public" should be better represented. Discussion followed as to the difficulty of finding a spokesman for such a group. Dr. Brodman mentioned the fact that many non-users were not sufficiently verbal to express their views, though exceptions were noted. Dr. Fussler thought a public opinion research firm could get data from the public more effectively than the Commission could in hearing testimony. Mr. Greenaway cited elected representatives of the people as one kind of contact the Commission had not yet established. Leaders in continuing education had also not been heard from. Mr. Greenaway felt the Commission should indicate to the White House or the public that there were whole areas that couldn't be covered in eleven or twelve months time. The Chairman said the Report would include a list of those substantive problems which the Commission had not been able to consider.

Mrs. Moore's committee to recommend sites for regional hearings having already reached agreement, it was recommended that Kentucky, Alabama, Pennsylvania, Texas, Arkansas, Oregon and Indiana be chosen as a start. A Subcommittee consisting of Mrs. Moore, Mr. Lacy, Mr. Greenaway, Mr. Elliott and Dr. Hubbard was appointed to organize such hearings, the rest of the Members making themselves available as called on to serve.

On the subject of the nature of the report Dr. Hubbard felt it would be best to take a few major positions. A broad, comprehensive overview would be unlikely to have much effect. He was concerned that they had heretofore not heard enough of the developing ideas of the Commission Members. He cautioned that disagreement would be inevitable since there are no clear solutions. Dr. Hubbard suggested that at the June meeting the Commission might pick out half a dozen areas in which it would be necessary to take a position. During the summer alternative postures for each of these positions could be developed by the Staff. Subsequently time could be set aside with these alternatives as the sole subject on the agenda so the Commission's views could be developed. Dr. Overhage and Dr. Fussler agreed.

Dr. Brodman expressed the view that the Commission was unlikely to hear anything very new at San Francisco. The Chairman noted Mr. Ruggles' quite valid point that there ought to be either quite a few more guests invited or none at all, since with several thousand librarians around the situation could be awkward.

Dr. Hubbard saw this as an opportunity to hear testimony from the less populated areas. The Chairman indicated that there was list development yet to do; perhaps a group might be invited as guests for dinner or after dinner one night. Dr. Fussler thought much impact was lost unless you met with persons across the country and Dr. Overhage agreed. Mrs. Moore pointed out that people in rural situations had not been heard.

Dr. Hubbard and Mr. Lacy thought some actual testimony on library service that is highly marketable in actual experience would be valuable. Undergraduate or public libraries were cited as examples.

The Chairman suggested deferring to the following day the decision about whom to hear. He noted that some information might be gotten at more easily by study or survey. He reminded the Commission that ALA was giving it every courtesy in San Francisco. Mr. Ruggles said each Member of the Commission would receive a schedule of all meetings and a guest card of admittance.

The Chairman pointed out that the very fact that the Commission had not heard testimony on certain problems was in itself instructive. It led to areas in which the Commission might have to accept responsibility. The Members had heard about past and present, but very little about the future. Those who should have talked about the future had not always done so. Though in general agreeing, Mr. Greenaway felt that testimony from the Library of Congress while not necessarily having the answers, had pointed to directions for future development.

Dr. Schramm generously invited the Commission to come to Stanford while in San Francisco if it sought a quiet place for deliberation. The Chairman added that in the early fall, he would be delighted to have the Commission come to Duke, which is an excellent setting for a quiet meeting. Both invitations were warmly received.

The Chairman thanked the Members for their participation and at 10:05 p.m. adjourned the Executive Session.

May 23, 1967

Interviews

The Commission was reconvened in General Session at the Carnegie Institution, Washington, D.C., at 9:05 a.m., May 23, 1967. In Dr. Knight's absence, Dr. Caryl P. Haskins presided. In addition to the Commission and Staff Members present (see page 1) the following representatives of the Office of Education appeared:

Mr. Harold Howe II, Commissioner of Education
Dr. Grant Venn, Associate Commissioner, Bureau
of Adult and Vocational Education
Mr. Lee Burchinal, Director, Division of Research
Training and Dissemination
Mr. Ray Fry, Director, Division of Library Services
and Educational Facilities
Mr. Eugene P. Kennedy, Chief, Library and Infor-
mation Science Research Branch
Mr. Alexander Mood, Assistant Commissioner,
National Center for Educational Statistics
Mr. Morris Ullman, Chief, Adult, Vocational and
Library Studies Branch

Commissioner Harold Howe II, U.S. Office of Education, Washington, D.C.

The Chairman introduced Commissioner Harold Howe II of the Office of Education, and several members of his staff, and indicated that Mr. Alexander Mood would appear later in the morning. He then invited Commissioner Howe to proceed in whatever manner he chose.

Commissioner Howe observed that certain papers had been distributed in advance and his staff might have others to distribute. He hoped to proceed informally, first with staff comment as to Office of Education responsibilities in the broad realm of libraries and some remarks by Mr. Burchinal relative to information handling and research of various kinds, followed by general discussion about these programs as well as others in which the Commission felt his office ought to be interested.

Deploring the great shortage of library personnel across the board, he cited the pending Education Professions Development Act (an amendment to the Higher Education Act) on which hearings are to be held in June and July as a tool which would grant broad authority to his office for promoting the training of personnel serving education in every capacity--from teachers' aide to college president. The bill provides an equally broad spectrum of granting authority, including colleges, universities, state boards of education, library boards, private industry, private foundations, or any other corporate agency that can provide a useful service. Of particular interest to Commissioner Howe was library service in the elementary schools, where the shortage of trained librarians is acute. Through this legislation he hopes for short courses to train library aides, semi- and sub-professionals to alleviate this shortage. In order to allow sufficient time for planning, it is proposed this legislation become operational in fiscal 1969. He solicited the Commission's recommendations as to imaginative use of such authority in providing manpower to libraries of all kinds.

Although there would be no appropriation under this act for 1968, the Commissioner intends to ask for at least an additional \$100 million above present levels for training purposes. Funds for training in all areas of education now run to about \$250 million annually, and he hopes to see this increased at least by one-third in 1969. A reasonable portion of the total would go to meeting the library manpower problem. Commissioner Howe added that the Library fellowship program had been left as a separate and distinct entity and was itself probably in need of expansion. On the library scene, however, he saw a greater need for support personnel than for M.A.'s and Ph. D.'s in library science. He felt this area has not been sufficiently explored.

Current policy level conversations involving people from HEW, other Departments, and the White House, regarding the broad problem of Federal support to higher education are taking place. The Carnegie Corporation has appointed a Committee chaired by Clark Kerr to look into this problem and other foundations have shown a similar interest. Private institutions of higher education are in serious trouble with student costs outstripping sources of support. Public institutions too are finding state support insufficient to meet their needs. Current support cannot accelerate at the rate needed to take care of both the increasing cost of education per student and the growing number of students

wanting higher education. OE has been working on statistics which show this to be a very real problem, one to which the Federal Government must address itself on a greater scale in the years ahead.

Computer and library services are one component of these increasing expenses. As more institutions seek to achieve quality in these respects costs will continue to escalate. The Commissioner pointed here to the great need for efficiency and planning. The nation cannot afford the luxury of completely independent information services at several thousand institutions. Quality would suffer at the expense of quantity.

He raised important questions about networks, such as EDUCOM, providing library and information services among institutions. What kind of networks would support teaching and research in the right way? And what kind of networks do indeed represent real efficiency in using materials, and real cooperation in sharing the strengths of institutions? Mr. Howe hoped the Commission would address itself to the problem of library and information services in higher education, which he sees as a major component of the total problem of increasing costs.

Commissioner Howe then called upon his staff to report on the kinds of programs they currently administer, their problems and recommendations as to the future of these programs.

Dr. Grant Venn, Associate Commissioner, Bureau of Adult and Vocational Education

Dr. Venn reported on the newly renamed Bureau of Adult, Vocational and Library Programs. Within this Bureau are four Divisions:

1. The Division of Vocational And Technical Education with programs in high schools, two-year institutions, community colleges and some four-year institutions.

2. The Division of Manpower Development and Training, to bring unemployed adults into the labor force.

3. The Division of Adult Education, with major programs in adult literacy and continuing education.

4. The Division of Library Services, which includes a branch concerned with Educational Television, Facilities and Equipment.

Though these Programs may seem unrelated, Mr. Grant Venn felt they reflected the future of education in this country. He thought a more appropriate title for his bureau might be "Bureau of Continuing Education". Its role is growing. The changing character of our work force has generated a need for new kinds of education and training. This is an ongoing process, with no termination. Essentially there is no longer such a thing as graduation.

Within the Division of Library Services a Library Planning and Development Branch is responsible for assessing future library needs and developing legislation to help meet these needs.

Dr. Venn saw a need for coordinating all hitherto separate library services (school, special, public) due to the pressures of population growth and of greatly increased demand from people who have not heretofore used libraries. In the future perhaps as much as 75% of our society will need library services on a continuing basis, as opposed to the 15% presently making use of library facilities. Projected need is greatest for services in retraining, continuing education, daily work, and citizen responsibility.

He felt the Division of Library Services ought to be using the talent available, seeking the advice of groups such as the Commission, to look down the road ahead toward increased efficiency and increased services throughout the country. He noted that the Division had not done more in the way of long range planning because of pressing immediate demands.

Mr. Ray Fry, Director, Division of Library Services and Educational Facilities

Mr. Fry mentioned materials which had been furnished the Commission outlining the history of the Division. He called attention to the fact that in 1965,

when the Office of Education was reorganized, some of the library activity was transferred to other bureaus and units, specifically, research to the Bureau of Research, statistics to the National Center, and Title II of the Elementary and Secondary Education Act to the Bureau of Elementary and Secondary Education.

Though many were concerned about this dispersion, he felt that given a little luck with recruitment the Office could coordinate all library activity.

Mr. Fry saw a need to recruit more specialists and to expand and organize his operation so that grants management would not overwhelm his staff and prevent them from tackling the big problem of overall planning and development for all kinds of libraries. To this end the Library Services operation had been reorganized into three branches. Two concentrate on grants management and a third devotes itself to long range planning and development. (See Appendix Q). Moreover some grants management personnel were being transferred to the field so they may develop a better sense of the needs, problems and opportunities of the states, state agencies, and institutions that they serve.

~~Division of Library Planning and Development Branch~~

Mr. Fry hoped to have specialists for each type of library. The Branch will be completely divorced from the grants programs, and he sees its specialists functioning in part as coordinating agents for all the other relevant programs in the Office of Education and other Federal agencies. The School Library specialist would be expected to have a full grasp of all Federal activities bearing on his field.

As to finances, current appropriation total is about \$610,000,000. Under the Higher Education Act, Title II (a) for improving college library resources, \$25 million has been allotted this year and the same amount has been requested for 1968. The Fellowship Program comes to just over \$8 million. Library Services and Construction Act funds currently include \$35 million for services, \$27 million for construction, and \$375,000 for planning in the area of interlibrary cooperation. In this last area, over two million dollars will become available for actual program expenditures next year. Under Title IV (a) for institutional library services, planning money to the extent of \$375,000 is currently available and next year the program money will amount to \$2,120,000.

Title IV (b), library services to the handicapped, also provides \$250,000 planning money this year, and in 1968 will make available \$1,320,000. Mr. Fry noted that he had not covered many of the big library programs administered in other bureaus, like Title II of the Elementary and Secondary Education Act which allows \$102 million this year for school library resources.

Mrs. Moore observed that many people were deeply concerned about the splintering of library efforts in OE, and about the scarcity of travel money which made it impossible for Office of Education personnel to attend professional meetings or see the situation in the field. She felt these specialists need to know what the library community is thinking and to this end travel funds are important. Dr. Venn replied that for the past two years his office had been handicapped by a reduction of travel moneys coming just at the end of the year. He added that in terms of the concept of regional knowledge, whereas state plans heretofore have come to Washington and been mailed back and forth for changes, a person in the field will now be in charge of these programs with authority to approve a state plan. A Field officer will meet with representatives from the six or seven states in his region to develop suitable state plans. There will be a much closer relationship between the OE and the states and institutions involved. Planning will be greatly facilitated.

Assignment of authority to regions will promote efficiency and relieve much of the burden at headquarters. Regional offices will have fiscal, grants management, and legal personnel. Problems can be worked out on the spot with expedition.

Noting her personal knowledge, through her Chairmanship of a State Library Agency in Arkansas, of the frustrations experienced in dealing with the Office of Education, Mrs. Moore reiterated her deep concern about fragmentation of the library program without the necessary coordination. She acknowledged that Mr. Fry's statement indicated awareness of the problem. Mr. Fry in turn pointed out the arguments for the three major programs in library funding which are administered in other branches of OE remaining where they are. He noted that the Office was trying to pull all kinds of research together. Nor would it make sense to separate the library construction from other academic facilities programming.

In response to a question by Mr. Lacy, Dr. Venn said he would give the Commission a memo summarizing OE's programs and the dollars that could be thought of as flowing to library activities from each program. Mr. Lacy felt this would be helpful.

Mr. Lee Burchinal, Director, Division of Research Training and Dissemination

Mr. Burchinal conveyed the regrets of Dr. R. Louis Bright, Associate Commissioner for the Bureau of Research at being unable to attend. In his absence Mr. Burchinal would explain why library research was now administered in the broader context of the entire Bureau of Research. He proposed to briefly describe the division and specifically the library program, discuss a few of the major issues, and have the details furnished by Mr. Eugene Kennedy, Acting Chief of the Library and Information Science Research Branch. He called the Commission's attention to two items which had been provided, a paper setting out some of the areas considered important (See Appendix R) and a mimeographed sheet entitled "Library and Information Science Research Program". (Appendix S). Mr. Burchinal went on to say that one division has been renamed the Division of Information, Technology and Dissemination (pending approval) to highlight the increasing significance given to library and information science research and to indicate its coverage of the entire range of the emerging technology.

Facilities existing within the Bureau of Research which can be brought to bear to support the library research program are:

(1) ERIC (Education Research Information Center), a national information system designed expressly to serve the needs of education.

(2) The Educational Materials Center, a special library operated in cooperation with the American Textbook Publishers and AID for overseas distribution of materials.

(3) An Equipment Development Branch to specify educational, library, or information needs and work with appropriate industrial and professional groups to develop the necessary equipment and related systems.

(4) Research Utilization Branch, which will study dissemination processes.

Moreover specialists in fields such as curriculum development, methodology, computer applications, instruction, and administration processes are available within the Bureau and their competence can be drawn upon.

This fiscal year, the Bureau has modest but adequate funds for beginning research in libraries and information systems. This amounts to \$3.55 million, but much of the remaining \$99 million research budget is relevant to the development of systems and networks. Thus other funds in the Bureau of Research will give both direct and indirect support to the library and information sciences.

In summary Mr. Burchinal feels that by concentrating all research in one Bureau, the OE can better coordinate planning and in certain cases draw on funds from other programs to support specific related efforts in library research.

Mr. Eugene Kennedy, Chief, Library and Information Science Research Branch

Mr. Eugene Kennedy spoke next, observing that apprehensions in January that his Division would not be able to commit all its funds had not materialized; rather a number of good projects must be held over until next year. To illustrate the program's diversity he mentioned several specific projects in addition to those described in the Bureau's statement about its program (See Appendix R).

The greatest emphasis in all Bureau supported research is on prototype development, testing and evaluation, demonstration and implementation, and integration of library services. The Bureau has been working with A. L. A. to identify potential research people.

Dr. Hubbard asked if the Bureau had received proposals to investigate the relationship of libraries and information services in our society. Mr. Kennedy replied that no such proposals had been received but realizing the importance of the question the Bureau hoped next year to use an "RFP" (request for proposal)

technique, letting people know that such an investigation was likely to receive support. He said he would welcome suggestions of other questions on which research should be stimulated. Mr. Burchinal felt calling attention to this as an important area for study would contribute toward getting activity, though little now except a series of status studies is being funded. Dr. Hubbard asked if there would be a specialist assigned to this area? Mr. Burchinal replied that no such specialist would be appointed in the Research Bureau, but in the Library Planning and Development Branch, a great deal of time would undoubtedly be spent on the developing role of libraries in our society.

Dr. Schramm asked where the Bureau would turn if it were looking for five people to write papers on the future role of libraries and other information services within society. Mr. Burchinal said a technique used successfully in the past is to take a critical subject matter area, bring in a few groups of interested parties to talk over the problem, and then make a small grant to a university or other body to develop the area, hire consultants, and come back with specific topics to be explored. Grants and contracts to develop the appropriate paper or other material would follow. Research is not conducted within the Bureau but its staff members try to remain sensitive to emerging needs and to develop work in the field. Most of the money, however, goes to unsolicited proposals.

Dr. Fussler asked if, when the Bureau discovers a clear requirement for hardware that does not exist, it puts out requests for proposals. Mr. Burchinal indicated it does so to a limited extent. More will be done when the Equipment Development Branch is fully staffed. Using the redesign of a microfiche reader as an example, he explained it could (1) commission basic research studies and generate graphs or curves which any engineering company could then translate into the optimal features for production, (2) commission another set of studies which would lead to specifications which would optimize in production the basic data which emerged from the first series of studies, and finally, (3) on competitive bidding, ask a company to produce a prototype and study it experimentally in actual use.

As to whether there would be library oriented persons within the Equipment Development Branch, he said there will be a small group but for the most part they will rely on consultants.

Mr. Greenaway brought up the whole broad problem of the non-users of libraries and asked if the Bureau were studying this problem. Mr. Kennedy cited two projects: (1) A proposal now being reviewed on providing metropolitan service in a large county area which is concerned with the non-user as well as the user, and (2) one to develop materials to keep the new adult reader interested in reading and in using public library services. The Division is also encouraging a study on the information requirements of large universities, looking at the information habits in general of both users and non-users.

Assuming continuing education to be the shape of the future and looking ahead ten years, Dr. Schramm asked how the Office of Education viewed the future. Dr. Venn thought within each kind of business or industrial area, resources would have to be immediately available. Moreover the nature of work was changing, with production becoming automated to free men for more thinking, and information resources would have to be readily available to the individual. He wondered if someone shouldn't bring library and institutional people together with those knowledgeable in long-range comprehensive community planning, architects, planners, poverty workers and the like, because he saw a great moat between needed and available service at the local operational level. He also saw the possibility through communications technology of quickly retrieving information from almost any part of the country.

Mrs. Wallace spoke of the need for partnership between Federal, state and local groups, for the strengthening and development of state library groups, for educating local groups and trustees, and for the spirit of cooperation. She urged the Office of Education not to forget the grass roots level.

Regretting the fact that he had to leave, Commissioner Howe promised to send various summaries to the Commission, and offered to help in any way he could. He pointed out that Alexander Mood, Assistant Commissioner of Education, in charge of the National Center for Educational Statistics, had arrived and could discuss both present and future patterns of information gathering relating to libraries.

On behalf of the Commission, the Chairman thanked Commissioner Howe for his participation, and the Commissioner departed.

Asked by Mrs. Frary if there were any way to pull together information about libraries from all possibly relevant government sources, Mr. Burchinal replied that a large scale program was being developed through ERIC and he hoped to announce the establishment of a clearinghouse for such information within the next week or two. Dr. Fussler wondered if there would be an active program of dissemination of such information. Mr. Burchinal replied that a monthly announcement bulletin is already circulated and within a year considerable bibliographic control should permit specialized distribution and state of the art reports, based on the collections.

Dr. Hubbard asked how this Educational Information Clearinghouse would relate to similar operations at LC, NLM, NAL, the AEC or NASA. Dr. Venn could not say but noted that they hoped to find an able person to study the matter and work full time on coordination with other appropriate agencies. Meanwhile he and Eugene Kennedy meet on a fairly regular basis with representatives of the Air Force, NSF, NLM, and LC and they are able to keep in touch with developments through participation in COSATI.

For the further information of the Commission, Mr. Burchinal pointed out that the Department of Commerce had been working for some months in attempting to bring under control a unified government management information system; a second edition of the COSATI inventory on information science is being prepared which will give the agencies involved necessary information on funded information projects in other agencies.

Dr. Hubbard asked how the Appropriations Committee deals with these multiple presentations (LC, NLM, COSATI). Mr. Burchinal replied that there is a mission responsibility for an agency quite apart from the problem which the Commission is investigating. The information systems are seen as only a part of the total mission-oriented operation. Asked if he felt this "competitive goal approach" of agency against agency for limited resources was the system we should retain, he was not prepared to offer a better alternative.

Dr. Hubbard asked if Dr. Venn had any comment on how the Commission could approach the serious issue of total Federal commitment to research in library and information systems?

Dr. Venn felt the Commission might wish to recommend that the Library Division look at such problems as these within its own shop, but right now it has neither the staff nor the flexibility to do so.

Dr. Brodman asked Dr. Venn to comment on the possibility of a continuing Commission on Libraries, which might oversee both the Federal libraries and the granting agencies, such as OE. Dr. Venn felt personally that there were too many library committees working already; what he would prefer is an overall library group to be a continuing policy-making organization assembling working committees for a short period of time for specific jobs.

Mr. Burchinal felt that the Bureau of the Budget was going to be in a position to exercise much closer scrutiny of federal agencies of the program planning budget sequence; he too saw a need for fewer but more powerful Committees.

Dr. Brodman asked in the event that such an overall policy making group were established, how should the internal federal library programs relate to those providing service outside the federal government? And what was the place of the Library of Congress in this picture?

Mr. Fry thought a permanent Commission was badly needed and as soon as possible, not necessarily with great authority or police powers, but to establish perspective. He felt the need of a national library which should be the Library of Congress.

At this point the Chairman introduced Mr. Alexander Mood and invited him to make his presentation.

Mr. Alexander Mood, Associate Commissioner, National Center for Educational Statistics.

Mr. Mood opened his remarks by saying that for most of its life, since its establishment in 1867, the information gathering and dissemination function has been the sole activity of OE, and as a result the educational community has come to depend entirely on the Office for quite an extensive compilation of management information each year.

He introduced Mr. Morris Ullman, Chief of the Adult, Vocational and Library Studies Branch, as having more familiarity with the state of the various data collection programs.

As to the problems of his center, Mr. Mood said they had limited resources and ambitious program for developing new data systems. When he arrived two years ago there was a "punch card" system, which has taken time to automate. Automation has temporarily cut into the statistical program. He noted that there is considerable turbulence in both OE and HEW. For example, today on the Hill, Title I of the Elementary and Secondary Education Act may be completely revised--which would require a complete revision of the Title I information system that has been developed over the past couple of years. Moreover, there is an outside management team in OE right now, who want a much more elaborate management information system than OE has currently. Such things require time, personnel, programmers, and computer hours, and coming from a higher level take precedence--so the regular statistical programs continue to slide.

Consequently, traditional statistics are being processed on a smaller scale. Mr. Mood does not expect that they will return to full-scale in the foreseeable future. Complete surveys will be replaced by sampling surveys, sampling of institutions and sampling over time. Though it is preferable to have traditional series every year, the resources are unavailable. It will be necessary to settle for every 2 or 3 years and use extrapolation and projection, meanwhile, correcting from time to time. Thus there will probably be fewer of the traditional tables devoted to library statistics as we have known them, though the Center will get many other kinds of information about libraries, which it hoped will offset the loss. Mr. Mood promised that the Commission would be among the first to see the new statistical program when it finally takes form.

The Chairman thanked Mr. Mood, who suggested Mr. Ullman join him in answering questions.

Dr. Hubbard asked for clarification on the new statistical procedures to be applied by Mr. Mood's center. Mr. Mood indicated that the center was going to try not to change the data categories, but henceforth the data reported would be derived from a selected sample instead of reflecting a comprehensive count.

Agreeing that much of the data currently collected probably does not need to be collected annually from every institution, Dr. Fussler suggested they look at the so-called critical data base that might be very easy to compile and have a reasonably good statistical validity. Since much of the data now being collected on libraries is not comparable, he saw the new procedures as a ray of light. Mr. Mood was delighted at his response.

Dr. Schramm applauded the use of sampling and asked if Mr. Mood's office could go out into the field this summer and put five questions on library use to a good population sample. Mr. Ullman said his office had discussed with the Census Bureau the possibility of formulating a series of questions on library utilization, but it was not likely that the interviews could be conducted before next spring.

Remarking on the Commission's great need for hard data and the substantial number of survey research centers scattered around the country, Dr. Hubbard wondered whether research grants or contracts might not be a more flexible means of discovering the institutional effect on the individual. Several public opinion research firms were mentioned as possible contractors able to move quickly on the problem. Mr. Ullman said his center had a number of projects under negotiation and he assumed it would be receptive to new research survey projects. However, he cautioned against undertaking a study prematurely, before a careful formulation of the needed data and the questions most useful for deriving it had been made. Dr. Hubbard agreed that the development of the item and its testing would be a major part of the effort -- not just the final door-ringing. Mr. Ullman thought this more of a drawback to getting out a study quickly than the actual collection of the data. Dr. Hubbard said his fundamental concern is that we find mechanisms, and unless the research is begun it will never get done. Mr. Ullman said it had begun.

Mrs. Moore felt the gathering of statistics should have a very definite effect on library planning and asked how, without statistics, one could prove to Congress that programs are successful. Mr. Mood felt Congress was convinced of the inadequacy of library statistics, but because of arbitrary ceilings, the shortage of funds, and the war, would not allocate funds in spite of their importance.

Dr. Venn added that under the program planning budget system the question is being asked more and more, will the dollars available produce more net return to the nation in terms of cost effectiveness if put into library programs as contrasted to basic adult literacy programs, vocational education, research in science, etc. Much data collected in the past was historical and traditional and could not be related to this specific question of cost effectiveness. The Center is trying to restructure this data so that it bears more on the planning and usage of money and its net effectiveness. He noted the complexity of getting data from 50 states (some with insufficient staff) with as many as 25,000 school districts.

Commenting on the self-critical mood of the morning, Mr. Greenaway pointed out that even with computerization the Commission was still without statistics--as bad and as incomplete as they had been. The Commission needs statistics to line up intelligent arguments for library legislation; there have not been many statistics on the library world since the reorganization of the OE and indeed even some of the statistics that were prepared before the reorganization have not yet been released. Could someone from the Office prepare an interim report on the profession outlining the predicament and giving some indication as to when something could be expected?

Mr. Ullman assured Mr. Greenaway that library statistics were not going to be eliminated. There were three types of possible activity. There is virtually no general information on library utilization or on libraries in general; that type of information, if anything, will be strengthened by a population sampling approach. The Center will continue to collect statistics in other ways, through institution reports, special surveys, or possibly through such sources as industry reports, where special libraries are concerned. Moreover, the tabulation of program statistics through the various OE programs reports will continue probably on an increased basis because this information is needed for planning and to measure the effectiveness of the programs.

Specifically, in terms of what is now in process, there will soon be available: (1) The analytical report of libraries, 1963-64, now being printed, with the 1964-65 figures to follow; (2) The 1965-66 library statistics put out by ALA, and (3) The 1965 public library survey (the part on libraries over 25,000 should be available in multilith

form by the ALA meetings in June). Some special tabulations have been prepared for use at the meetings. These are the highlights; the details are in the memorandum which the Commission has already received.

Dr. Overhage asked Mr. Burchinal if there were any work in progress or planned dealing with the question of measuring the effectiveness of libraries? Mr. Burchinal replied that certainly this would have to be pursued as a next step of any cost benefit analysis but that no study was currently focused on that problem. Dr. Overhage indicated that he would like to see someone come to grips with how to measure the effectiveness of the library operation. Some graduate students at MIT were beginning to approach the problem, but it was a very tough one. Mr. Burchinal observed that this was probably why they had not been flooded with proposals in this field. Both hoped research in this area could be stimulated. Mr. Clapp suggested a conference might be useful to air the question first. Mr. Burchinal said they would be pleased to receive proposals or exploratory suggestions along that line. (See Appendices M, N, O).

The Chairman expressed his appreciation to the Commission's guests, and cordially invited them to remain for cocktails and lunch. He then adjourned the meeting at 12:14 p. m.

Executive Session

The Commission was reconvened in Executive Session at the Carnegie Institution, Washington, D. C. , at 2:05 p. m. , May 23, 1967, Dr. Douglas M. Knight presiding.

The Chairman opened the meeting by expressing regret that he had been unable to attend the morning session, and gratitude to the Commission's host, Dr. Haskins, for chairing that session.

Referring to the list of studies, he noted progress in that only two had not yet been negotiated ("Special Libraries" and "Extra-Library Information Dissemination Systems").

Mrs. Moore asked how Members would be notified of their monitoring duties? The Chairman suggested that before leaving the Members indicate in which studies they have particular interest; the list could then be rectified so each Member would be involved in no more than two and each Member would be notified in writing about his specific duties. He expected to assign two monitors per study. He then asked Dr. Burkhardt and Mr. Lacy for brief verbal reports on their studies.

On the "Research Library" study, Dr. Burkhardt reported a third meeting had been held the previous Thursday. The first draft of a paper on bibliographical controls and dissemination will be ready by the June 3 meeting, and at least the first draft of a paper on manpower and personnel requirements by the next meeting. He has already seen a very good first draft on automation and libraries and two additional papers are being prepared, one on Federal structure and one on state structure. A small preamble, a sort of statement of the case, has also been commissioned. Mr. Brockaway will work on the papers over the summer and at the first meeting in September will submit what should be the penultimate stage for which the Committee will suggest revisions. By October he hopes to present the completed study to the Commission.

Asked by Mrs. Gallagher how he defines a research library, he said the committee was defining it mainly in terms of the universal encyclopedic research library rather than the specialized one used by a constituency of scholars (i. e., the big university library, or N. Y. P. L.) with no specification as to number of volumes. Though starting with academic libraries, he agreed with Mr. Greenaway that the major metropolitan public libraries, which have more in common with academic than with popular libraries, should not be forgotten.

The Chairman expressed delight with the progress on this complex study and asked if when the Federal study were roughed out Taylor Cole might have a chance to see it and integrate it with his work. Dr. Burkhardt agreed and suggested Mr. Blitzer keep in touch with Taylor Cole.

Mr. Greenaway felt an important omission from the list was the interest of American libraries in countries abroad. Expressing regret at the trend toward disappearance of American libraries abroad, and noting the President's interest in bringing

education to other parts of the world, he hoped for a strong paper emphasizing this area. While agreeing this is a neglected area, the Chairman felt a study would be most complex and suggested this should be identified in the report as an area calling for further study. Mr. Greenaway saw this as one possible reason for a continuation of the Commission.

Asked by Dr. Fussler if the Number Two study on "Library Economics" would be broadened to include the value to society of prompt and efficient acquisition of knowledge, Mr. Ruggles said he had discussed Dr. Fussler's letter with those working on the study and they would give it as much attention as possible in the time available. Dr. Fussler thought even recognition of the existence of the issue to be a step in the right direction, since the value of knowledge to society is the issue on which further large-scale support is likely to be based. He noted that it was an extremely difficult research problem, and agreed with Mr. Ruggles that it was very similar to the measure of effectiveness problem which Dr. Overhage had discussed that morning. Mr. Ruggles said this would also be a macro-economic attempt to estimate total costs of various types of library activities similar to a study Fritz Machlup had done a couple of years ago.

Responding to a question by Mr. Clapp, Mr. Ruggles said cost of the studies varied from \$6,000 to \$25,000 that there was agreement to undertake all but the last two, that through bureaucratic delay the funds had not reached Duke until last week and in the meantime Duke had to figure out the format for the contracts; as a result several people had been working for weeks now on faith.

Relating to Study Number Five, "Library Statistics", Mr. Clapp had been shocked to learn that morning of the current state of library statistics as studies with which he had been concerned--involving OE specifically--had led him to expect better. Mr. Ruggles assured him that Mathematica had been in touch with all parties concerned.

¹Machlup, Fritz, Production and Distribution of Knowledge in the United States, Princeton, Princeton University Press, 1962.

As to Study Number One, "Impact of Social Change on Libraries", Mr. Lacy reported it will be an effort to do an interpretive kind of preface to the report; about the only real research contemplated is the Book Committee's plan, when funds are available, to hire a research assistant and a clerk to send out a questionnaire to a fairly large sample of primarily public libraries, asking their impressions as to the impact of various kinds of social change on the demands that have been placed on their libraries. Mr. Clapp mentioned a study by the demographer Philip Hauser in 1961.¹ Mr. Lacy said he and Hauser both had contributed pieces to a Graduate Library School summer conference on trends in adult services in 1957.² His own contribution was on social change in adult public library services, which was the sort of thing he was thinking of doing for this study, more comprehensively. The Chairman felt in the process Mr. Lacy might well have some ideas to suggest.

As to Studies Numbers Eight, Nine, Ten and Eleven, all by Nelson Associates, Mr. Clapp wondered if they would be enumerative or descriptive. Mr. Ruggles said their main purpose was to identify the principal problems confronting various types of libraries and to suggest solutions or at least areas where solutions might be found. Mr. Clapp felt this was useful and asked if this was what Dr. Burkhardt was doing for the research libraries on a larger canvas. Dr. Burkhardt replied in the affirmative. Mr. Ruggles added that Advisory Committees are being set up for the Nelson studies which have been held up by lack of funds. Mrs. Frary has been working with the Staff on the "School Libraries" study.

The Chairman hoped each of these studies would include enough description of the current state of its respective kind of library to overcome some of the impressions and mythology at large. Mr. Clapp thought Nelson could present the basic statistics. The Chairman felt it particularly important to identify the public served, since this had shifted so much. He felt this information was needed if only in an impressionistic form in a paragraph or description.

¹Hauser, Philip and Taitel, Martin, "Population Trends-- Prologue to Library Development", in Library Trends, vol.10 (July 1961) pp. 10-67.

²Library Quarterly, October 1957.

Mr. Ruggles shared Dr. Brodman's worry that Studies Numbers Sixteen and Seventeen, if not assigned soon, would not be completed in time. He reported that Nelson, with whom the Staff had begun negotiations had now decided they could not do the "Special Libraries" Study. Several potential contractors were discussed.

As to Study Number Thirteen, "Library Buildings and Facilities" Mr. Greenaway asked if the Educational Facilities Laboratory would be very broad in its concept. Dr. Fussler replied that they had talked to him about the matter a couple of weeks before. They hope to hold a small two-day conference with a relatively good roster of people the first or second week in June on the impact of technology. Whether they will go beyond this in terms of an analysis of the physical facility requirements of the country is not clear--there is a preoccupation with the technological impact of space. He suggested checking with Ruth Weinstock in New York to make sure they aren't limiting their consideration to this aspect. Mr. Ruggles said he had been waiting for Dr. Eurich's return, and would be in touch with him soon. Dr. Fussler mentioned some potentially useful data in their field though cautioned against accepting it unquestioningly.

The Chairman suggested that between now and the June meeting a brief informal report on the concept that lies behind each study be distributed to all Members for discussion in San Francisco so it would be possible to see if any were getting off the track. Dr. Fussler thought this an excellent idea and Dr. Overhage agreed. Noting that each of these contracts would include a description of what the contract is for, Dr. Burkhardt asked if these descriptions could be reproduced. This would give a basis for amendments and suggestions if necessary. Mr. Ruggles hoped to have them available before the San Francisco meeting.

Despite the generous offer to meet at Palo Alto, the Chairman gathered that many felt a major consideration in going to the West Coast was attending the ALA meetings in San Francisco. He asked if it were the sense of the group that they should be part of the meeting. Several Members expressed agreement.

Recognizing the Commission will be reaching the public in many ways, through ALA regional meetings of the library associations, advisory committees, and distinguished guests in the fall, the Chairman asked if it should stop hearing witnesses and begin to put forward ideas for discussion. Mr. Greenaway, Mr. Lacy, Dr. Overhage and Mrs. Moore all agreed with Dr. Brodman's earlier recommendation that the Commission should stop hearing testimony unless it had something specifically new to offer.

Mr. Clapp felt the Chairman's upcoming address to the ALA would take pressure off the Commission to have further hearings of the type it had been having; the Chairman hoped so.

Feeling ALA should not be allowed to dominate Commission thinking, Mr. Greenaway hoped some Commission members nearby could attend the impending SLA meeting in New York. Mr. Ruggles felt the Executive Secretary, Bill Woods, would be glad to invite members to any meetings in which they were interested. He agreed with Dr. Brodman that the Commission might solicit SLA advice as to who should do the study on "Special Libraries". Mr. Ruggles, who had already made plans to attend the meetings, said he would be delighted if any of the members cared to join him. Mr. Greenaway said he would be in touch.

Dr. Fussler again mentioned it would be useful if McGeorge Bundy could be persuaded to talk to the Commission about information handling in the next ten years, also other men in similar positions to give thoughtful consideration to Commission problems. He agreed with Mr. Lacy that the three major foundations, Rockefeller, Carnegie and Ford, should be heard from separately. Several additional names were proposed, among them Bill Baker, Fred Cole, Donald Hornig, and Arthur Schlesinger. Discussion followed as to the most appropriate time to call on such individuals for their ideas. The chairman felt they should be brought in for discussions only after the Commission had tentative ideas of its own to put forward.

Turning to the summer schedule, Mrs. Moore reported that her Subcommittee recommend holding ten or twelve public hearings during July and August around the country in areas needing strong Congressional support and areas which feel chronically neglected. She noted that sometimes these overlap. The Subcommittee had been discussing necessary staff with Mr. Ruggles and Dr. Reed. It was felt that at least three Commission Members should be present at each session. Specific places had been discussed, but no firm decisions made. The next step was to acquire experienced staff to organize the meetings, at which the Commission should hear not only librarians, but representatives of the general public such as labor and farm leaders, legislators, etc.

Mr. Clapp asked if testimony would be solicited on the content of the Executive Order or be more specific. Would the committees seek ideas or information on local situations? Mr. Elliott hoped for representation from people served by book-mobiles, from labor unions, etc. He suggested consolidating the President's statement into a one-page letter soliciting the views of local figures to be selected by the Staff. He proposed the statements be submitted in writing in advance. It was hoped that the presence of the Commission Members would stimulate local interest and receive press coverage. Mr. Elliott thought meetings should be held in a Federal Court House, County Court House, a City Hall or other public place so the public would feel free to attend. Mr. Clapp agreed with Mr. Lacy that a verbatim reporter should take notes of the proceedings. Mrs. Gallagher thought it important to have some Commission Members who were not local present. Mrs. Moore agreed the Member heading the hearing should not be from the vicinity. Several matters of procedure were then discussed.

Mrs. Frary felt that unless there was some coverage of this testimony in the final report the people cooperating were being sold short. Dr. Brodman suggested including a list of the people who testify. Mr. Lacy felt the testimony itself would obviously be too repetitive for inclusion.

Mrs. Moore suggested seeking out some people who no longer use public libraries and asking why. She pointed also to the value of inviting legislators or outstanding governors who might then feel an obligation to do something about the problems raised. She asked for reactions from the group.

The Members expressed approval of the idea and pleasure that the hearings would be held under the able and experienced leadership of Mr. Elliott and Mrs. Moore. Mrs. Gallagher moved and it was duly seconded that Mrs. Moore and Mr. Elliott be given authority to proceed. Detecting no dissent, the Chairman saw no need for a motion and expressed his appreciation to the Committee. When a precise list of places and dates had been compiled he promised to take the matter up with the White House. Since these hearings are not written into the present Commission procedure, the Chairman promised to take up the problem of paying additional staff as well.


Dr. Burkhardt inquired about the possibility of using research money for such staff since these hearings were indeed a kind of survey research. This proposal was taken under consideration.

The Chairman brought up the increasingly urgent and delicate question of publicity about the Commission's work and asked if it would be useful to seek a statement of current White House feeling about how much the Commission can say before the White House itself receives the study. Mr. Elliott thought this would be most useful. The Chairman said this would be one of the next matters he would take up with the White House.

Following a brief discussion of housekeeping details, the Chairman characterized the current meeting as a "turning point". The Members would now receive a substantive outline which would serve as a skeleton for discussion. At San Francisco they could reduce it to the areas most in need of debate.

The Chairman thanked the Members for their participation and adjourned the meeting at 4:48 p. m.

Approved by the Commission
at its seventh meeting on
June 25, 1967 in San Francisco,
California.


Douglas M. Knight, Chairman

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
L. Quincy Mumford
Librarian of Congress
May 22, 1967
Appendix A

Summary of Principal Issues Discussed in Presentations of
the Program and Plans of the Library of Congress

1. For many decades the Library of Congress has had broad authority to undertake national library functions in addition to its intensive service to the Congress. These include national and international acquisitions and cataloging programs, serving as a national center for research, administration of copyright law and the international government documents exchange program; development of national union catalogs and other national bibliographical controls; development of interlibrary loan and photoduplication service; development of extensive area and subject bibliographies of national value; development of national preservation program.

2. Formal recognition by the Congress of the Library's dual role as Library of Congress and the National Library of the United States would be helpful, but this would need to be more than a Congressional Resolution; it must be a felt demand from the country, sufficiently strong to convince the Congress that funds must be provided to assure adequate support for these broad national responsibilities.

3. The Library of Congress is part of the Legislative Branch, and there are many reasons why it should remain in this Branch, including the fact that it submits its requests directly to the Congress. There is also the important tradition of pride which the Congress has in the Library.

A permanent National Commission on Libraries could assist in finding a pattern of bookkeeping that would not attribute all of the National Library's funding to the cost of operating the Legislative Branch.

4. Impressive progress has been made in advancing the Library's budget from approximately \$9,500,000 in 1954 to more than \$32,000,000 in fiscal 1967. Transferred and gift and trust funds bring the total to \$44,000,000 for this fiscal year. But funding for major national programs is still difficult.

The established pattern of transferred funds to LC from the Executive could be extended to vigorous support in the Government for fuller exploitation of research resources.

5. Insufficient space for the Library of Congress continues to be a critical problem. The third Library building (Madison Memorial Library Building) has been authorized; planning is going forward; the next step will be to obtain funds for final drawings and for construction. A minimum of five years will be required for completion of the structure. In the meantime, additional rental space is being sought. Building plans take into account the need for automated equipment and more use of compact storage for certain kinds of materials.

6. The Library's world wide acquisitions program, its distinguished comprehensive collections, its catalogs, card-distribution service, and the variety and scope of its technical publications, together with the prestige and respect with which the Library of Congress is regarded nationally and internationally, make it a unique national bibliographical center.

7. LC's increasing number of cooperative programs with other libraries and the growing complexity of interrelationships among disciplines has necessitated studies of the possibilities of an automated system for the central bibliographic apparatus. LC has been moving forward on basic automation studies essential to proper planning for automated library operations -- two principal current efforts are the initiation of a study of the automation of the central bibliographic apparatus and the initiation and development of the pilot Project MARC by which a standard machine-readable catalog record is created for use within LC and for distribution to participating libraries.

8. The Library of Congress is committed to playing a central role in the planning and operation of an appropriate national library and information network encompassing all areas of knowledge, including science and technology. LC already stands at the focus of a large information network -- one that has developed over the years in direct response to actual needs. This dynamic network cannot be ignored nor supplanted in paper plans for a network. For handling purposes information is inseparable from the media in which it is found. The development of a responsive, flexible communications medium is basic to establishment of an effective network, and development of a standard file record -- or the librarian's term of bibliographical control -- is central to the development of the communications medium. This record must be open-ended, multi-purpose, and responsive to the wide variety of products and services a national network must provide. LC is approaching the network problem from the technical point-of-view. Because of the size and complexity of the collections and services of the Library of Congress and the network relationships it has with the national and international library and information as the work on the standard format for catalog copy on tape through the MARC project, represents a significant step toward the kind of effective national information network all desire to see achieved.

9. The three national libraries -- Library of Congress, National Library of Medicine, and National Agricultural Library are pursuing cooperative programs in acquisitions, cataloging, and other common areas; they have organized a task force to identify common problems and to work cooperatively toward their solution.

10. The Library's distinguished collections in science and technology, the largest in the world, form the basis for its national science program, which includes extensive reference and bibliographic services, some of which are supported by other Federal agencies and by the industrial and scientific communities. Agencies in the Executive Branch rely heavily on the Library's resources in science and technology. The Library of Congress believes that its capabilities in science and technology must be of the highest order.

The National Referral Center for Science and Technology provides an important referral or clearing-house service and has demonstrated that its techniques for collecting, processing, and transferring of specialized information are sufficiently sound to form the basis for an expanded activity.

11. The Library of Congress' broad humanistic and cultural programs embrace all disciplines and are national in scope; many are international in that they contribute to research in other countries.

Future programs for the Library as a national center for organization, control, and dissemination of information about recorded knowledge in all areas are almost limitless. In addition to further expansion of its central acquisitions and cataloging programs, automation effort, materials' preservation program, there could be enlarged bibliographic or information centers for science and technology, social sciences, arts and humanities, and for coverage of special areas, such as Hispanic America, Slavic and Central Europe, the Orient, Africa, Western Europe, Australia and the Pacific Islands, and the United States. National union catalogs might be developed for recordings, motion pictures, tapes, prints, photographs, maps. Such centers and related activities would probably operate best as integral units of the Library of Congress, which would work in cooperation with appropriate professional groups representing the research community as well as with other Federal agencies whose needs and interests were to be served. Extension of the practice of accepting funds for projects on contract to include non-Government agencies would be one way of broadening the Library's national service to the private research community.

12. The Library of Congress has the most comprehensive collections in all fields of knowledge and probably the largest group of technically competent and highly trained personnel with experience in bibliographic and information service.

13. The Library's broad range of services, the complexity of its organization, and the scope of its collections equip it for the central role it must continue to hold in national library and information planning.

14. The Congress is increasingly aware of the importance of the role and services of the Library of Congress in the total library and information dissemination program of the nation.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
William J. Welsh
Associate Director
Processing Department
Library of Congress
May 22, 1967
Appendix B

The National Bibliographical Center, Some Processing Department
Activities

The Library of Congress serves as the national library of the United States and its collections are by far the largest in the Western Hemisphere and probably the largest in the world. Its bibliographical services are of national and international scope and significance.

The resources of the Library for the acquisition of materials are unique in this country, both in magnitude and character. The Library enjoys in particular three privileges: First, the mandatory deposit of works copyrighted in the United States; second, the receipt, through treaties and other formal international agreements, of the official publications of foreign nations; and third, the use of the special facilities of the Government for the acquisition of non-official publications from abroad. Purchases from some 1,000 dealers and informal exchange arrangements with over 24,000 institutions supplement these sources. Thus, the official status and international reputation of the Library of Congress bring to it vast quantities of material not readily available to other libraries. Its total receipts number over 8,000,000 books, pamphlets, serial issues, and other items per year -- one item every second of the working day.

The Higher Education Act of 1965 (P. L. 89-239, Title II, Part C) gave the Librarian of Congress the responsibility for acquiring insofar as possible all library materials currently published throughout the world which are of value to scholarship, of cataloging them promptly after receipt, and of distributing bibliographic information through printed cards and by other means. Under this program,

called the National Program for Acquisitions and Cataloging (NPAC) at home and the Shared Cataloging Program abroad -- the foreign procurement program of the Library is being expanded on a worldwide scale and there is being developed a national centralized cataloging effort sufficiently wide in scope and rapid in execution to cope with existing and anticipated needs. Since the spring of 1966 there have been established eight Title II-C overseas offices in Europe, Africa, and South America. Arrangements with numerous foreign book dealers and contracts with the producers of 13 current national bibliographies have speeded acquisitions and cataloging data to the Library. The program will be extended to other areas of the world as rapidly as appropriations permit. Funds have been available for just a year and only \$3,300,000 has been appropriated for the program to date. HEW's appropriations request asked for only \$4 million for fiscal 1968, but LC has testified in favor of full funding -- the \$7,700,000 authorized for fiscal 1968 in the Higher Education Act.

The Library also carries on special programs for the acquisition of publications from India, Pakistan, Nepal, Ceylon, Indonesia, Israel, the United Arab Republic, and Yugoslavia under the Agricultural Trade Development and Assistance Act (P. L. 83-480), as amended, which permits the use of U. S. owned foreign currencies for this purpose. Since January 1962 some 6,000,000 publications (both in English and in foreign languages) have been shipped to American libraries and research centers in each of the 50 States through the Library's nine P. L. 480 offices in the countries named.

The tremendous range of the Library's acquisitions makes possible massive programs for the cataloging of the publications acquired and for the dissemination of bibliographical data. LC began to make its catalog cards available to other libraries in 1901 and in fiscal 1966, the last year for which complete figures are available, some 19,000 libraries purchased over 63,000,000 Library of Congress printed catalog cards. The cards provide full and accurate descriptions of the titles cataloged, including the subjects covered, indicate the presence of bibliographies, and give two alternative subject classifications, one according to the Library's own system and the other that of the Dewey Decimal Classification. These cards are regarded as the standard in this country and abroad.

The product of the Library's cataloging efforts is also made available in the form of current book catalogs issued monthly and cumulated quarterly, annually, and quinquennially. The chief of these book catalogs, the National Union Catalog, is now being sent to more than 1,700 libraries, both domestic and foreign. With LC's stepped-up program for the acquisition and cataloging of foreign language materials, the NUC is becoming, more and more, an international bibliography of materials of research value. Issued since 1956, it reproduces not only the cards prepared by the Library of Congress but also those from several hundred other cooperating American libraries and indicates the locations of each title. In order to complete in book form this unique bibliographical record, the Library is presently engaged in editing more than 16,000,000 cards for some 10,000,000 titles and editions in the pre-1956 National Union Catalog, which has hitherto been available only on cards and only at the Library of Congress. When the project is completed, the 600 volumes, each over 700 pages, will provide a record of the books of research value held by some 700 major libraries in the United States and Canada. This gigantic publication effort is being undertaken by Mansell Information/Publishing, Ltd. of London and Chicago, under contract with the American Library Association, but at no expense to the ALA or the Government.

Over 156,000 periodicals and other serial publications in nearly 1,000 North American libraries can be located through the Union List of Serials in Libraries of the United States and Canada, published by the Library of Congress in 1966. The record is being kept up to date through a current and continuing publication, New Serial Titles. Other current Library publications of a bibliographical character are devoted to listing by subject the books added to the Library's collections; to registering publications which are available in microfilm or other forms of microreproduction; to recording, with locations, the books and periodicals being received from the USSR by the Library of Congress and nearly 400 other American libraries; to listing the official publications issued by the individual States of the United States; and to making known, through accession lists, the materials acquired in India, Pakistan, and the other countries covered by the P. L. 480 Program.

Serial publications, the lifeblood of research, present a serious control problem for all libraries. The National Science Foundation, which has been interested in a "National Inventory of Scientific and Technical Journals," asked LC to comment on a feasibility study NSF had the Information Dynamics Corporation make. LC replied that because of the broad data base it already has for such an inventory, it would undertake the program, now called the "Serials Data Program," provided that (1) other libraries, especially the National Agricultural Library and the National Library of Medicine, would cooperate fully; (2) adequate funding could be provided for the creation of the data base, the system design, and system testing, and (3) the coverage be broadened to include the humanities and social sciences as well as science and technology. The library community has endorsed LC as the proper executant of the program, LC has drawn up a proposal for performing the work in several phases; the Joint Committee on the Union List of Serials is seeking funds for the support of the opening phases, and there seem to be good prospects for joint funding by NSF and the Council on Library Resources.

Through the use of computers and photocomposition, the Library publishes successive editions, with monthly supplements, of the list of subject headings used in its catalogs. This is the standard list for all American and many foreign libraries. The Library's system of classification is made available to a rapidly increasing number of libraries through publication of the classification schedules, with supplementary lists of additions and changes. The Library also edits for publication, in frequent editions, the other widely used system, the Dewey Decimal Classification.

The worldwide acquisitions program, the superb collections, the unequalled catalogs, the subject and language capabilities of its staff -- a resource in itself, the card-distribution service, and the variety and comprehensiveness of its current technical publications, together with the prestige and respect with which the Library of Congress is regarded nationally and internationally, make it unique among American libraries as the national bibliographical center.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Paul Reimers
Coordinator
Information Systems Office
Library of Congress
May 22, 1967
Appendix C

Automation Developments At The Library Of Congress

The automation program of the Library of Congress was born of necessity, has been pursued with vision, and now promises a Library of greater service. The necessity for automation was brought about by the ever-increasing volume of published material which must be reviewed, selected, and organized. Called by some the information explosion, the volume of material is only one facet of the challenge. Another is the recognition of more complex interrelationships among disciplines -- interrelationships which must be understood and provided for. Interrelationships still to be expressed must be anticipated in the design of any system. It is this need to anticipate requirements that demands vision in carrying out the steps leading to a system. The system now envisioned will meet stated needs and will, when installed, provide services not now available. In other words, the future system must handle the work but must not merely automate existing procedures. Furthermore, since the Library of Congress stands at the center of the library community -- or the apex, if you wish -- the system developed must serve not only the LC's needs here in Washington but must also serve the national library needs.

In order to explain the current program of automation, therefore, it will be necessary to review briefly how each activity began and where it now is. From an understanding of the current status, the structure of the future system can be seen.

Background

The information explosion is usually perceived as having begun after the end of World War II, when results of government-backed development appeared in the technical journals. Output from

technology as well as from humanistic disciplines had begun to increase before then but growth was less apparent during the war years. By the nineteen-fifties, the growth in work-load and the potentialities of computer assistance had become apparent. Studies were therefore conducted in the Library of Congress to determine how automation could alleviate this growing problem. These studies isolated areas for more intensive review but emphasized that technical review and advice were needed.

Consequently, the Librarian of Congress in 1961 requested that a group of specialists develop a long-range plan for automation of the Library. Under a grant from the Council on Library Resources, Inc., a survey team chaired by Gilbert King studied the Library, with greatest concentration of attention upon the central bibliographic apparatus. The team report,¹ submitted to the Librarian in 1963 and published early in 1964, was widely disseminated.

The team found that automation of the central bibliographic apparatus was not only possible but feasible. It recommended that the Librarian contract for the development of a system and that he organize a group within the Library "to administer the automation project and to assume responsibility for its continuing implementation."

The Information Systems Office (ISO) was organized as part of the Office of the Librarian to carry out this recommendation. ISO conducted studies of the flow of information and the structure of essential files. On the basis of the results of these studies and the recommendations of the survey team, proposals were requested from industry to conduct a full system study.² Several proposals were received by March 1, 1966. After analysis and rating, the United Aircraft Corporate Systems Division was awarded a contract to perform the first three of a seven-phase study. The phases are shown in Table I.

During the same period that the central bibliographic apparatus was being considered, procedures were being advanced to distribute bibliographic information in a form which could be

manipulated by machine. The advantages of machine processing were becoming more apparent as some libraries applied computer technology to business procedures, acquisition efforts, and circulation. Handling of bibliographic material was expensive for individual libraries because each bibliographic record had to be hand-punched. A practice which had received wide acceptance in business was that of capturing data at the source so that it could be used in all subsequent operations. Since the Library of Congress was already the major source of bibliographic data for the American library community, it was natural that LC should produce a machine-readable bibliographic record.

Early in 1964, a study was conducted and a method was recommended by which a machine-readable record of bibliographic information could be created³ for use within the Library of Congress and distribution to other libraries. The initial study was supported by the Council on Library Resources, Inc.

A plan for a machine format was developed⁴ by the Information Systems Office and was issued for comment. Planning Memorandum Number 3 proposed a standard format which was discussed in a series of meetings. As a result, the machine format was modified and an experiment was decided upon to test the feasibility of distributing and using magnetic tapes. In December 1965 the Council on Library Resources made a grant to the Library to advance research in machine-readable cataloging data. By February of 1966, the experiment was fully planned and the effort began to be known as project MARC (for MAchine Readable Cataloging).

In order for MARC to be a meaningful experiment, certain undertakings had to be made. The Council on Library Resources agreed to provide funds for the design of the basic system and the production of computer programs. The Library of Congress provided space for the experiment, personnel, and computer facilities to enter the data on magnetic tapes. A number of participating libraries agreed to accept the tapes, to use them, and to report their experiences. English language monographs were to be included and current tapes were to be distributed for a period of not less than six months at LC's expense.

These undertakings by the cooperating parties implied a number of constraints. Understanding these constraints is important to understanding the status of the project and results to be expected from it. The budget was fixed in advance by the grant from the Council and matching funds from the Library. This meant that the system could be designed and all programs written for the central operation but it also meant that only the most basic programs could be supplied to participants. A second constraint was that the experiment had to be in operation in the shortest possible time. This was necessary if outputs were to be useful for other developments which were proceeding in parallel. A third constraint was that the available computer was to be used because a different computer could not be justified for so limited an experiment. The nature of the experiment also demanded that normal cataloging at the Library of Congress not be disrupted and that recipients be limited in number while providing a wide range of missions and broad geographical dispersion. Table II shows the elements of the MARC system and Table III lists the primary and secondary libraries that are receiving the tapes.

In addition to the two major efforts in automation, a number of others have been carried forward and still others have been proposed. The Manuscript Division controls its very large collection by means of an automated procedure. The Order Division of the Library has long used business machines to monitor the flow of work and status of funds; and it is looking to automated methods for comparing possible accessions against work in process. The Library is also studying ways to automate the operations of the Card Distribution Service.

The Legislative Reference Service faces quite a different kind of problem as it reacts to Congressional needs for research. In an increasingly complex environment of producers of information, the Legislative Reference Service must provide a custom service as well as continue to issue such congressional tools as the Digest of Public General Bills and Resolutions. A task is under way to define the system required and to automate production of the Digest of Public General Bills and Resolutions.

Status

Automation of the central bibliographic apparatus is now in its third phase. The work in Phase I reviewed pertinent operations of the Library and documented the flow and storage of data. Phase II developed the requirements for an automated system -- what it was expected to do and what loads could be anticipated. Phase III is describing alternative systems that can meet these requirements. In January of 1968 this phase will be completed so that system specifications can be developed.

MARC is operating as a pilot project. Only selected English monographs have been entered in the magnetic tape. The current tape now contains more than 12,000 entries and 800 a week are being added. The operating system is being improved to increase efficiency. Changes in the MARC format itself are being considered in the light of experience with the pilot project. Languages other than English will be added to determine how output is affected. It is expected that by June 30, 1968, MARC tapes will be generally available, through the Card Distribution Service, to any libraries that may wish to order them.

Although the two large projects must be administered separately so that each can progress at its own rate, they are supporting each other. The central bibliographic study considers what goes on inside the Library while MARC is concerned mainly with external uses of LC data. The central bibliographic system is theoretical in its approach because no system for libraries as complex as that necessary for LC has been designed. MARC, on the other hand, is providing empirical user data. By operating side by side each project is gaining valuable insights from the other.

Conclusion

The thrust of the work in automation of the Library of Congress has been to use machines to improve those operations for which the Library is uniquely responsible. This means that attention has been directed to the bibliographic record -- to how it is produced, to how it is distributed, and to how it is used.

Greater automation of the process will make possible greater depth of indexing. A more flexible format may make possible the addition of elements not now carried.

The search for feasible automation of the Library of Congress has been guided by the principle that honest research should seek a best solution. The objectives are very clear but there are no rigid preconceptions on how these objectives are to be reached. Following this course will most surely solve tomorrow's problems with tomorrow's equipment. When the hardware with the necessary capacity becomes available, LC will, it is expected, be ready to utilize it in an automated central bibliographic system of national utility.

REFERENCES

1. King, Gilbert W., and others. Automation and the Library of Congress (Washington: Government Printing Office, 1963. 88p.) Available.
2. Markuson, Barbara Evans. "A System Development Study for the Library of Congress Automation Program," The Library Quarterly, v. 36, July 1966, pp. 197-273.
3. Buckland, Lawrence F. The Recording of Library of Congress Bibliographical Data in Machine Form, A Report Prepared for the Council on Library Resources, Inc. Revised (Washington: Council on Library Resources, Inc., 1965, 54 p.)
4. U. S. Library of Congress. Information Systems Office. Planning Memorandum number 3. A Proposed Format for a Standardized Machine-Readable Catalog Record. A preliminary draft prepared by Henriette D. Avram, Ruth S. Freitag, and Kay D. Guiles (Washington: Library of Congress, 1965, 110 p.).

TABLE I

PhaseInitial Contract

- | | |
|---|--------------------------|
| 1 | Survey of Present System |
| 2 | System Requirements |
| 3 | Functional Description |

Follow-on Contracts

- | | |
|---|-----------------------|
| 4 | System Specifications |
| 5 | System Design |
| 6 | Implementation |

Operation

- | | |
|---|-----------|
| 7 | Operation |
|---|-----------|

TABLE II
MARC ELEMENTS

- 1) A method for capturing English language catalog data, for monographs, together with any pertinent new name or subject cross references, at the earliest possible time when the cataloging record is complete.
- 2) A method for editing and transcribing catalog cards into a format for subsequent conversion to machine-readable form. The data so edited included both traditional catalog information and additional data to allow more sophisticated machine searching and processing.
- 3) A method for converting data to punched paper tape form.
- 4) Computer equipment and programs for conversion of punched paper tape data to magnetic tape.
- 5) A tape format which provides for three different kinds of records: the full catalog record, the cross reference tracing record for names and subjects, and an abbreviated author/title record.
- 6) Computer printout of printed copy for proofreading.
- 7) Error correction routines.
- 8) Computer programs to provide file maintenance routines and print routines to produce a limited number of traditional library products, e. g. complete set of catalog cards with overprinted headings.
- 9) Distribution routines for sending new tapes to users and recirculating old tapes back into the system.
- 10) Methods for evaluating the effectiveness of the MARC operational procedures and the utility of the MARC data.

TABLE III

PRIMARY AND SECONDARY LIBRARIES OF THE MARC PILOT
PROJECT

<u>Primary</u>	<u>Secondary</u>
Argonne National Laboratory	Cleveland Public Library Sandia Corporation, Albuquerque, N. M. Oak Park Regional Proc. Center
University of Florida	Florida Atlantic University
Harvard University	Cornell University Columbia University
Montgomery County Public Schools	U. S. Naval Academy
Nassau Library System (NYC)	SUNY -- Stony Brook Curriculum & Enrichment Center (NYC)
Rice University	Texas A & M
University of California (LA)	Institute of Library Research (Berkeley) SUNY -- Buffalo Univ. of Calif. (Santa Cruz & Irvine)
Washington State Library	Washington State Univ. (Pullman) Dept. of Public Instruction (Olympia)
Yale University	Pa. State Medical Library (Hershey) University of New Mexico Med. Lib. Purdue University
Indiana University	University of Wisconsin (Madison)

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Roy P. Basler
Director
Reference Department
Library of Congress
May 22, 1967
Appendix D

HUMANISTIC AND CULTURAL PROGRAMS
OF THE LIBRARY OF CONGRESS

Thinking in conventional academic terms, the inclusive name for the many "non-scientific" programs of the Library may be called "humanistic and cultural." These programs embrace both the social sciences and the arts, ranging over all areas of the world, collecting research materials in practically every form (manuscripts, maps, music, sound recordings, photographs, motion pictures) as well as materials in print, and undertaking to develop aids (bibliographies, lists, and indexes) to facilitate the use of these materials.

Some of these programs are organized and conducted on a geographical or cultural area basis; e. g., Africa, or Hispanic America, Slavic and Central Europe, the Orient, and of course our primary area of responsibility, the United States. Some others among the Library's programs are organized around a particular field of knowledge, such as music or literature, or around a particular type of material, such as manuscripts or pictorial materials. A few of these programs of interest may represent the many which are illustrated by the numerous titles of Library of Congress publications familiar to the particular clientele of the Library for which they have been produced.

The program in Hispanic American studies is a good example of an ongoing area program. This is a geographical area for which the Library has exceptionally strong collections, largely as the result of the Archer M. Huntington endowment which supports the activities of the Hispanic Foundation. In addition to recommending materials for acquisition and providing public reference services, this Division of the Reference Department engages in project or special program work, carried out principally on grants.

The most important regular bibliographical enterprise is the preparation of the Handbook of Latin American Studies by a special unit within the Hispanic Foundation. It prepares preliminary material, and assigns and reviews the annotations contributed by a corps of approximately 75 specialists in the social sciences and humanities, to prepare a manuscript that appears annually, covering the humanities and social sciences in alternating years. The HLAS is now in its 29th volume. An example of other work carried on in the regular work program is revision of a bibliography of paperback books related to Latin America, first published in 1962, now augmented, revised, and annotated.

Ford Foundation grants support a number of important activities. Currently in progress is completion of a cumulative index to the HLAS, covering authors (65,000) and subjects (for approximately 100,000 entries), Vols. 1-28 (1936-66). A two-year study of the coverage of periodical literature for HLAS, with recommendations for its improvement, is also scheduled. To be completed soon is a comprehensive guide to the Archive of Hispanic Literature on Tape, originally developed from endowment funds, with aid from Rockefeller Foundation, Office of Education, and Ford Foundation funds. To begin in September 1967 is a 30-month program to complete a guide to the more than 400 Hispanic manuscript collections in the Library of Congress. Continuing will be a program to collect further manuscripts related to Gabriela Mistral, the Chilean Nobel Prize winner, on microfilm, and a calendar of her known literary works, as well as a bibliography of published materials. Recently begun is a revision of the National Directory of Latin Americanists, originally funded from the Office of Education, and published in 1966; this involves also an interesting experiment by the Hispanic Foundation in computerizing the data, so that the tape will be kept constantly up to date and new editions can be printed by GPO immediately as needed.

In cooperation with learned groups, especially the Conference on Latin American History and the Latin American Studies Association, the Hispanic Foundation has undertaken important programs of mutual benefit. Scheduled for completion in approximately a year is a Guide to the Historical Literature of Latin America; terminating within a very short time is a Union List of Latin American Newspapers in major U. S. repositories; both of these programs were joint with the CLAH. Working closely with the Committee on Scholarly Resources of LASA, the Division is aiding in development of an acquisitions manual on Latin American materials for colleges and universities. This is closely connected with a program to bring via photo-reproduction out-of-print materials into print for individuals and institutions, partially funded by the Xerox Corporation through LASA.

The African studies program is another area program of particular current interest. The African Section of the General Reference and Bibliography Division was established in 1960 by means of a grant of \$200,000 from the Carnegie Corporation of New York. Its establishment recognized the growing importance of African studies and the Section is now funded from regular appropriations. Through numerous acquisitions trips to publishing centers on the African continent and elsewhere, the Library's collections of material basic to African studies have been conspicuously increased during the past half decade. One of the African Section's most important continuing activities during the seven years of its life has been to gain adequate bibliographical control of these materials. To date, no less than 15 guides to the official publications of African administrations have been published or authorized for publication.

Other area programs (e. g., Slavic and Central Europe, Middle East, South Asia, Japan), most of them started in the Library long before area studies became the vogue at American universities, are aimed at serving those areas of research for government and for the research community in general. For the U. S. A., which is the Library's foremost area of responsibility, perhaps one of the Library's outstanding bibliographic projects should be mentioned as just one example. The monumental Guide to the Study of the United States of America: Representative Books Reflecting the Development of American Life and Thought,

published in 1960, was a labor of many persons covering a period of nearly seven years. Referred to in a number of "fan letters" and reviews as "the best bargain of 1960," it has been reprinted at the GPO's own expense. A supplement covering the years 1955-65 is being prepared and should be available for purchase not later than Fiscal Year 1969.

One of the Library's larger programs organized around a particular type of material (such as music, maps, fine prints, photographs, etc.) is the manuscript program. The collections which the Manuscript Division administers are composed preponderantly of the personal papers of public figures and the records of those private bodies which, in a strictly national sense, have influenced the lives and fortunes of their countrymen. These collections begin with the discovery of the New World and continue to the present time. They now consist of approximately 30 million pieces and include writings of whatsoever kind that possess evidential value, illuminate a personality, or provide a basis for scholarly judgment on actions and events. They include the papers of 23 Presidents of the United States, statemen and politicians, land, sea and air captains, jurists, lawyers, inventors, clergymen, financiers, industrialists, scientists, journalists, poets, dramatists, novelists, publishers, scholars, feminists, actors and actresses.

Perhaps the best single example of the Manuscript Division's bibliographical programs is its Presidents' Papers Index Series. The most recent one, the Index to the Andrew Jackson, appeared in March, and the number of published indexes is now 16. An earlier Calendar of the Papers of Martin Van Buren has also been republished, but is not counted as one the 16 indexes. This series is the result of the wish of the Congress and the President, as expressed by Public Law 85-147, as amended, approved August 16, 1957, to have the papers of the Presidents in the Library of Congress arranged, indexed, and microfilmed in order "to preserve their contents against destruction by war or other calamity," to make the Presidential Papers more "readily available for study and research," and to inspire informed patriotism. The indexes are produced by the use of key-punched cards. The information on the cards is sorted and printed by computer.

The success of the Presidential Papers Project has led to employment of other automated techniques in the Manuscript Division. On July 1, 1966, the Division inaugurated one of the major phases of a comprehensive system that will give it the most completely automated records of any reference division in the Library. Punched cards have been put to use as call slips in the Manuscript Division Reading Room and are serving a variety of record-keeping purposes.

The punched-card slip is merely one phase of a program initiated several years ago but only recently completed and perfected by staff members of the Manuscript Division and the Library's Data Processing Office. The program brings together in one automated record the reference information, accession records, processing information, and statistics on use for each of the Division's collections. The varied information has been unified in a Master Manuscript Record, which consolidates data from the collection catalog, the accession record, the case files, call slips, and central charge records, with different codes used to indicate whether the material has been sent to the repair shop, the bindery, or the Photoduplication Service and whether placed on exhibit or used in interlibrary loan, etc. Thus the Division's statistics on the use are automatically compiled.

A related program, still experimental but showing great promise from a series of tests that have been made, is aimed at automatically indexing the finding aids to some 500 of the Division's collections, which contain more than half the material on its shelves. With this Master Index Record, it will be possible to analyze names and subjects within collections. It is planned to run the Master Manuscript Record and the Master Index Record in tandem to produce not only descriptions of the holdings of the Division but analyses of their contents. The two programs are designed to serve most needs of staff members when dealing with the manuscript collections, as well as to provide better service to the patrons of the Division. The programs are also capable of producing catalog entries, new or updated finding aids, copy as the basis for printed guides to the Division's holdings, quarterly and annual statistics, information about processing, laminating and binding needs, lists of donors from whom the Library has received manuscript materials or of other sources of acquisition, and a multitude of other facts and statistics which may be retrieved to answer specific questions or to

provide general statements about all of the Division's holdings. The Presidential Papers Section in the Manuscript Division has been using punched cards since 1958 to prepare its indexes.

As new collections are added to the Division's holdings, information about them will be integrated with that about older holdings in the Master Manuscript Record and the Master Index Record, and the records will thus be continually updated.

Returning again to the Manuscript Division's bibliographic programs, it should be observed that projects other than the Presidents' Papers Index Series are constantly under way in the Division. The two most recently authorized are The Jacksonians and Civil War Manuscripts: A Guide to Sources in the Library of Congress.

On a nation-wide scope, the Library's principal effort to make manuscript materials more readily accessible to scholarship is the National Union Catalog of Manuscript Collections. This catalog is an invaluable tool for scholars seeking to locate manuscripts pertaining to their subject fields and for librarians and archivists. It was begun by the Library in 1959 with grants from the Council on Library Resources and has been continued with funds appropriated by the Congress. Libraries, archives, and other institutions throughout the nation have cooperated in reporting information about individual collections they hold, and their descriptions have been published in four volumes with indexes. The latest volume (4) records descriptions reported and prepared for publication in 1965. Volume 4 describes 2,022 manuscript collections in 120 repositories in 48 of the 50 states. Together with the earlier volumes, the National Union Catalog of Manuscript Collections now covers 16,397 manuscript collections, reported since 1959 by 492 institutions in 48 states, the District of Columbia, and the Canal Zone.

Most recent among projects to facilitate research in manuscript materials is the Library's Center for Coordination of Foreign Manuscript Copying. The Center was established in the Library in the summer of 1965 through a grant of \$75,300 from the Council on Library Resources. The Center seeks to coordinate photocopying projects conducted in foreign libraries and archives by American scholars and institutions and to avoid duplication of effort and

expense through cooperative planning. With the cooperation of American libraries, universities, learned societies, and Government agencies, the Center (1) identifies extensive photocopying projects which have been completed, are under way, or are planned; (2) records the location of copies of foreign collections in this country; (3) assists American institutions in learning which manuscript collections can be photocopied in foreign libraries and archives; and (4) disseminates this information to the scholarly community. The location of existing photocopies is recorded in the National Union Catalog of Manuscript Collections.

In the arts, the Library carries on numerous programs, outstanding among them that of music. In connection with the world's leading collection of music in all forms (manuscripts, published works, and sound recordings), which is heavily increasing under the most active solicitation of gifts of manuscripts and recordings, as well as acquisition of published works through regular channels, the Library carries on, by means of endowments, a regular concert season of chamber music.

In 1924, Mrs. Elizabeth Sprague Coolidge, seeking a permanent institution to continue her work beyond her lifetime, approached the Librarian of Congress Herbert Putnam about establishing an endowment. The following year Dr. Putnam obtained passage by Congress of the Act of March 3, 1925, which created the Library of Congress Trust Fund Board with authority "to accept, receive, hold, and administer such gifts, bequests or devises of property for the benefit of, or in connection with, the Library, its collections, or its services. . . ." From that consultation between Dr. Putnam and Mrs. Coolidge grew the Coolidge Foundation in the Library of Congress; the Coolidge Auditorium, opened in October 1925 for the first of the Library's Coolidge festivals; some 2,000 concerts of contemporary and classical music, more than half in other cities; radio broadcasts of many of these; commissions from the Coolidge Foundation to dozens of composers; and the acquisition of hundreds of music manuscripts written by these and other composers.

In 1935 came the first of the many outstanding gifts of Mrs. Gertrude Clarke Whittall. A devotee of chamber music, she had carefully acquired a collection of Stradivari instruments, three violins, a viola, and a cello. These were accompanied by five matching Tourte bows. She presented these to the Library, not

merely for preservation but for use in concerts. The first of these occurred on January 10, 1936, to be followed by some 700 in the next thirty years. Another of Mrs. Whittall's gifts is the Whittall Pavilion, built in 1937 to house the instruments and provide a room for cultural events. In 1941, she enabled the Library to acquire a brilliant group of autograph scores, and thus began the Whittall Foundation Collection of Autograph Musical Scores and Letters, the original manuscripts of Beethoven, Brahms, Haydn, Mendelssohn, Mozart, Schönberg, Schubert, and others.

In 1949, the Serge Koussevitzky Music Foundation was established in the Library to encourage composers by providing opportunities to write new music. Commissions have gone to such composers as Bartók, Bergsma, Bernstein, Milhaud, and Villa-Lobos. Many of the new works have been performed in Koussevitzky concerts in the Library or in concerts of the Library's other foundations. All the resulting manuscripts come to the Music Division.

Similarly the Library carries on a continuing program in the literary arts, with particular emphasis on poetry. The 1930's brought the first gifts for poetry and literature. In 1936, philanthropist and scholar Archer M. Huntington, adding to his earlier gifts for Hispanic studies, established a trust to provide for a chair of poetry in the English language. The consultantship in poetry is held for one- or two-year terms by distinguished poets appointed by the Librarian. They advise the Library on its collections, give public lectures and readings, and call attention to the national interest in poetry. In his own way, each consultant contributes something special to the post and to the Library's needs at the time of his consultantship.

In 1951 the Library received the initial gift establishing the Gertrude Clarke Whittall Poetry and Literature Fund, followed later by the Whittall Collection of Literary Manuscripts. From this fund, enlarged by several later gifts, have come 16 seasons of poetry readings, dramatic programs, and literary lectures, many of them published.

Among the many national and international cultural meetings and conferences which the Library has sponsored have been the National Poetry Festival in 1962 (grant from Bollingen Foundation),

the Shakespeare Festival in 1964 (Whittall Foundation and Whittall Poetry and Literature Funds), the Dante Symposium in 1965 (Whittall Poetry and Literature Fund), and the Symposium on American Literature, 1965 (grant from Carnegie Foundation). The Modern Language Association of America published the proceedings of the Symposium on American Literature for the Library last year.

Mention may be made also of the program in the pictorial arts, based upon the Library's extensive collections of pictorial materials (approximately 175,000 drawings and prints from the fifteenth century to the present; approximately 1,800,000 photographs including the famous Brady Collection and numerous examples of earlier daguerreotypists, etc., as well as huge collections of the work of the twentieth century photographers; and 86,000 reels of motion pictures, comprising some 30,000 titles), which present one of the most challenging opportunities to serve increasing research activity. With this type of material libraries in general have not done as much in organizing, cataloging, listing, and indexing, as they have done with books, monographs, etc.

The Library's acquisitions policies for acquiring pictorial materials are being formulated in terms of present-day needs (especially in photography and motion pictures); the conservation and preservation of deteriorating materials (e.g., prints on old paper, motion pictures on nitrate film) is being undertaken in terms of new technological advances (de-acidification, microcopying, etc.); and a sophisticated subject index of the entire pictorial collection is being planned with a view towards utilization of electronic data processing techniques.

When these programs are well toward completion, and when funds for these purposes have been allocated in the required amounts, users of these collections will be able to search our holdings using a convenient pictorial catalog, arranged by subject, artist, place, time, etc., and call for only the original works needed. The original objects will be mounted, matted, or otherwise protected, and housed in modern equipment, so that they will be undamaged in storage and by handling. More motion pictures researchers than can now be accommodated will be able to view file copies of film on reading machines (such as moviolas), and projection copies will be made to protect the archival original film from damage through handling.

It is our hope that an increased program of publication will provide picture and film lists, bibliographies, and catalogs of collections in far greater numbers than now exist, so that our service will be truly national in scope. Use of the collections ought to be facilitated for scholars far from Washington, as well as visitors to the Division. For example, with financial support from the Ford Foundation, the Library is preparing for publication in the near future a Catalog of American Artists' Prints, Eighteenth Century to the Present, in the Library of Congress Collections, approximately 14,000 prints in all.

Like other programs in the arts, the program in fine prints relies heavily on gift funds. At his death in 1926, Joseph Pennell bequeathed the bulk of his estate to the Library to complete the collection of his own prints, to enlarge the Pennell Collection of Whistleriana, and to purchase original prints by modern artists, these to be "of the greatest excellence only." Some years after the death, in 1936, of Mrs. Pennell, also a donor, the Library began the annual, now the biannual, National Exhibition of Prints. In its early days the exhibit was a means of viewing the new work of artists throughout the country for possible purchase. As it became an important event to printmakers, however, it came also to serve as an encouragement to artists. The selection jury always consists of an etcher and a lithographer of artistic eminence and the Chief of the Prints and Photographs Division. Purchases for the Library are made with the student of printmaking in mind. Contemporary prints are also purchased through sources other than the artists, and these provide other exhibits of recent Pennell Fund acquisitions.

These are a few highlights of the humanistic, bibliographic, and cultural programs of the Library, which are greatly enriched by gift funds. As the years have passed, the fruits of the Act of March 3, 1925, establishing the Library of Congress Trust Fund Board have indeed been prolific. But the basic services and staff, as well as the majority of publications issued by the Library in the various humanistic and cultural disciplines, have been paid for from funds appropriated annually by Congress.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Marvin W. McFarland
Chief
Science and Technology Division
Library of Congress
May 22, 1967
Appendix E

SCIENCE AND RELATED ACTIVITIES
OF THE LIBRARY OF CONGRESS

Thomas Jefferson is not only the patron saint of the Library of Congress but also of science and technology as a field of interest in the Library. Although the Library began, in 1800, merely as a parliamentary library, it acquired the quality of universality as a result of the purchase by Congress, in 1815, of Jefferson's personal library which contained some 500 volumes in natural philosophy, agriculture, chemistry, zoology, and the technical arts, or a little more than five percent of the collection. Today, a century and a half later, more than 25 percent of the volumes in the Library's classified collections are in science and technology. Besides these more than two million books, there are nearly 20,000 current scientific and technical journals and approximately a million technical reports--to say nothing of manuscripts, prints, and still and motion films. These science collections are the largest in the world. In some subject areas, such as aeronautics, they are preeminent, and in others, such as Soviet technical literature, they are exceedingly fine.

Science and Technology Division Programs

The focal point for science activities within LC is the Science and Technology Division, which has the primary responsibility for all reference and bibliographic services in all fields of science and

technology and for the development of the collections. The Division has no custodial responsibility for books or periodicals, nor for special form materials, such as maps, manuscripts, and photographs, but it is charged with the custody, control, and servicing of the Library's large and rapidly growing collection of technical reports. This important but hard-to-handle literature is received not only from Federal agencies with large research and development programs, such as the Department of Defense, the Atomic Energy Commission, the Federal Aviation Agency, and the National Aeronautics and Space Administration, but also from State and local agencies, and from colleges, universities, and industrial concerns in this country, as well as from government and private organizations abroad. Reports are received, moreover, in several forms--ink-print hard copy, microfilm, and microfiche. In most instances, the Library does not catalog technical reports and add them to its general collections, but relies upon the announcement and abstracting and indexing services provided by the issuing body.

Given the size, rate of growth, and importance of this literature, more effective measures for dealing with it must be found. The Science and Technology Division is at present attempting to develop a control data program for technical reports, starting with the construction of a technical reports series catalog in machine-readable form. A subset of this effort is the development of some manageable form of alpha-numeric series codes. LC is, of course, not alone in its concern for improvement in technical report handling. We are, therefore, working as closely as we can with other groups within and outside the Government. Whatever the Library ultimately does with technical reports must be compatible with other handling systems. We also want to avoid any unnecessary duplication, and are particularly anxious that, as the Library's automation program proceeds, we are able to utilize the cataloging, abstracting, and indexing that is carried out elsewhere. An area in which we may be able to make a primary contribution is in bringing under bibliographical control the non-Federal and foreign technical report literature which is not now being treated systematically by any agency or information service in this country.

The Library's scientific and technical materials are the stock-in-trade of the Science and Technology Division's reference and bibliographic services, which are available to the members and committees of Congress and their staffs, to other Government agencies, to the scientific community, and to the general public. The services offered are of three types. The first is a free reference and bibliographic service similar to that offered by large

research and public libraries. Within the limits of staff and time available, the Division each year answers some 20,000-25,000 inquiries of a substantive or bibliographic nature which it receives by letter, telephone call, or personal visit from just about anyone--scientist, college student, industrial firm, or merely curious citizen.

Second, the Division offers a paid literature-searching service to the industrial community. In practice, anyone with the need for information and the money to pay for it can make use of this service, but it is intended to make the Library's collections more completely accessible to industry than we could afford to make them without reimbursement. This activity was initiated several years ago under an arrangement between the Library and the Department of Commerce, whose Clearinghouse for Federal Scientific and Technical Information has a statutory responsibility to make available to the industrial community, for a fee, the technical report literature that represents the results of Federally supported research. It was LC's feeling that those who needed the Federal report literature might also benefit by a search of the related periodical and monographic literature.

The third type is a bibliographic service available only to other Government agencies which reimburse the Library through transferred funds. The Division does about three quarters of a million dollars' worth of cataloging, abstracting, and indexing work on a regular basis for Executive Branch agencies such as Department of Defense, NASA, and AEC, when, for whatever reason, they cannot do the job in house or contract it out to private concerns. Usually the products are continuing comprehensive bibliographies in special subject areas, with abstracts and indexes which are published in annual or periodic volumes, with or without intermediary card services, with microfilm and hard copy reproduction of the full text of articles where the customer requires this and provided there is no conflict with copyright. A few of the subjects currently being covered are: radioisotopes and food irradiation; air pollution; snow, ice, and permafrost; the Antarctic; the strategic and tactical employment of nuclear weapons; bioregenerating systems; properties of air-reactive, water-reactive, and hypergolic materials; unidentified flying objects; and aerospace medicine and biology.

An important aspect of the work of the Science and Technology Division is the issuance of publications. Virtually all of the bibliographic work done on transferred funds results in publications which are either distributed free by the sponsoring agency or sold through the Clearinghouse for Federal Scientific and Technical Information or by the Government Printing Office. Apart from these sponsored publications, the Division also compiles special bibliographies and other documents designed to bring under bibliographic control some particular segment of the Library's science and technology collections. Two such publications which will appear this summer are "Weather Modification in the Soviet Union" and "Nuclear Science in Mainland China."

The Library realizes that not only must our collections and our staff be improved but also the techniques on which we must rely in order to provide wide-ranging, in-depth reference, bibliographic, and information services within the rapid response times that our many publics have a right to expect of us. The Science and Technology Division is therefore much concerned with research and planning for the application of new techniques and new technologies to our operations. In an institution and a profession that is undergoing rapid changes on a variety of fronts, the Library believes that its capabilities in science and technology must be of the highest order.

The National Referral Center for Science and Technology

The Science and Technology Division is by no means the only unit of the Library concerned with Science. A closely related activity is the National Referral Center for Science and Technology.

The Center was established in the Library in 1962 and it has been funded by the Office of Science Information Service of the National Science Foundation. The Center has four basic tasks: (1) To inventory all significant information resources in science and technology; (2) to provide any organization or individual working in science and technology, on request, with information about these resources; (3) to compile and publish in book form directories of scientific and technical information resources; and (4) to analyze the operating relationships comprised in the scientific information complex.

"Information resource" is defined in very broad terms to include any facility, collection, or service maintained on a continuing basis that provides data or material of any kind in any form that may help satisfy the information needs of members of the scientific and technical communities--that is, any organization, group, service, library, center, or even individual, from which or from whom authoritative technical information is available. Using these information resources, the Center provides a referral or clearinghouse-type service by putting the inquirer in touch with the particular resource or resources which can best fill his information needs. The Center does not provide substantive answers to questions, but instead acts as a kind of technical equivalent of the yellow pages of the telephone directory.

To date three directories have been published: The first, a general guide, compiled when the Center's inventory was very small, on resources in the physical, biological, and engineering sciences; the second, a directory of resources in the social sciences; the third, issued last fall, was the first special subject directory and it covered information resources relating to water, excluding oceanography. A directory of Federal and Federally-sponsored information resources in science and technology is now in press.

The Center has been an experiment in a new kind of systematized information service. Not until recently has it been asked by outside groups, either Government or private, to compile special directories in their areas of interest. The Office of Education of the Department of Health, Education, and Welfare, however, has now proposed that the Center compile for it a special directory of information resources in education, to be supported by transferred funds. Similarly, the referral responses the Center has made have been the result of individual inquiries, from industrial firms, from laboratories, from libraries, from individual scientists or engineers. It has not been asked to provide continuing service to a group or a community or to a large technical program. There is, however, a current proposal from the Office of State Technical Services of the Department of Commerce under which, with funds transferred by the Department, the Center would operate, for perhaps six months, a referral service or clearinghouse linking information resources of interest to business and industry in a sample region of the United States--a group of four or five States. On the basis

of the results of this pilot operation, State Technical Services, with the aid of the Center, would then design a national technical services referral network which, it is hoped, the Center would operate on a continuing basis, with funds transferred from year to year by Commerce.

Neither of these plans has yet been formalized, though the Library, the National Science Foundation, and the two Executive Departments concerned are in negotiation as to details, as to ways and means. The significance of these developments is that the National Referral Center appears to have survived the experimental stage and to have demonstrated not only that its inventory of information resources and its referral services have utility but that the techniques for the collection, processing, and transfer of its special brand of information are sound enough to form the basis for expanded, accelerated, and intensified information activity. The Library believes that the Center merits continuation.

Other Scientific Services

Because the Library has the know-how and the collections, it has for many years performed large-scale bibliographic services with funds transferred by Executive Branch agencies. The work of the Library's Aerospace Technology Division, which is entirely supported by the Department of Defense, is one case in point. It produces both abstracts and technical reports based on Soviet and Mainland Chinese open literature. Although these products are primarily designated for the Department of Defense research and development community, and are specifically tailored to meet the requirements of this community, they are also disseminated to the public at large. The vehicle for reaching the secondary audience is the Federal Clearinghouse for Scientific and Technical Information of the Department of Commerce. ATD technical reports are distributed directly to the Clearinghouse for sale to the public. ATD abstracts are made available to the Joint Publications Research Service, a part of the Clearinghouse, and are incorporated into the JPRS Scientific Abstract Series, available to the public on subscription from the Clearinghouse.

This brief summary of the Library's scientific activities covers merely the highlights; it does not pretend to tell the whole story. It serves, nevertheless, to underline a fact that is too often forgotten--

that the Executive Branch departments rely heavily upon the resources of the Library of Congress, an agency in the Legislative Branch of the Government. This longstanding and mutually beneficial relationship illustrates that the serious problems which, it is said, the separation of the Government into three branches poses for the creation of a national library system, can be overcome when there is the desire and the will to work together for the benefit of the scientific community and of the entire Government.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
SUBMITTED BY
Paul L. Berry
May 22, 1967
Appendix F

A NATIONAL PRESERVATION PROGRAM
AND A PILOT PROJECT IN LC

The preservation of materials is a routine activity in nearly all libraries, but the extent of individual library programs varies with the character of the materials collected, the purpose of the library, its geographical location (that is, in cold or warm climates), and with the degree of responsibility for maintaining collections over a long period of time. Research libraries generally collect a wide variety of library materials (many in such newer forms as photocopies, motion picture films, and recordings), serve a varied clientele, and have an obligation to retain important research materials. Such libraries have many preservation problems in common, the greatest of which is the poor quality of the paper used in books published during the past hundred years. The Library of Congress, of course, has faced these same problems with the preservation of its own collections.

The need for a common attack on preservation problems has become increasingly evident in recent years. Much basic research--sponsored by individual libraries, national library associations, and the Council on Library Resources--has been directed toward identifying the causes of paper deterioration and toward seeking methods by which deterioration might be retarded. Replacement of the original document by a photocopy, usually miniaturized, provides a substitute for the textural content of the original, but it does not replace entirely the original bibliographic item as a physical object. Furthermore, the photocopy is expensive and less convenient to use in many instances. Preservation of the

original material--in many cases an absolute requirement because of rarity, typographical, or other bibliographic importance--is considered to be a desirable objective to be sought more widely. The Library of Congress and many other libraries have undertaken preservation programs, but since all types of preservative measures are costly and since there is now such a vast quantity of library material to be preserved, the pooling of resources is indicated. Over three-quarters of a million dollars are spent annually by the Library of Congress for binding, microfilming, mounting, laminating, deacidification, and other forms of preservation of library materials, and similar large sums are spent by other major libraries.

During recent years the Library of Congress has joined actively in discussions among libraries to expand preservation activities, particularly through membership on the Preservation Committee of the Association of Research Libraries. This committee has sponsored some basic studies, such as a report with recommendations by Gordon Williams in 1964. As a result of the expanded interest in preservation there has been a specific agreement to develop a national program with the Library of Congress assuming a central role. Activities under the national program will include the identification of essential research materials of lasting significance; development of specific methods to locate and save the best remaining examples of these essential materials; establishment of a central register of locations of national preservation copies; possible creation of a central repository; preparation of suitable substitute service copies; pursuit of further research directed toward identifying the causes of deterioration; and programs to eliminate both causes and effects. The Library of Congress is planning now to take the central role in this national effort, working closely with the national library associations (especially the American Library Association and the Association of Research Libraries), individual libraries, and such technical associations as the National Microfilm Association, the United States of America Standards Institute, Library Binding Institute, and the paper trades. Some additional funds have already been requested from the Congress for fiscal 1968 to support an expanded program, but further funds will be needed as the dimensions and direction of the program take shape.

As a part of its acceptance of responsibility for the national program, two specific developments have occurred in the Library of Congress recently. Early in March the Librarian announced the appointment of an experienced librarian to head the preservation program--Frazer G. Poole, head librarian of the Chicago Circle campus of the University of Illinois, and formerly director of ALA's Library Technology Project. Mr. Poole has had experience with different aspects of preservation of library materials and has demonstrated his ability to manage major library programs--both essential aspects of the expanded program in LC. He will report in June. In December, 1966, the Council on Library Resources made a grant to the Association of Research Libraries which in turn asked the Library to undertake a pilot project concerned with the management problems in developing the national program. Utilizing a group of Library of Congress books already identified as deteriorating--a collection of some 30,000 books too brittle to bind--a project librarian will plan methods for the searching and identification of the location of other copies and devise specific procedures which can be used to collect information as to the existence of the best copy for preservation. Critical management and interlibrary problems will be identified and described for policy consideration by the Library and the ARL Preservation Committee, and the results of the study will be helpful in future program planning. About one year will be required for the completion of this project effort.

Also as a part of its national responsibility the Library will join in support of further research which is still needed in this field. In this activity the Library plans to set up a small laboratory for research and testing, but also to work closely with existing agencies in their current research. We need, for example, a rapid and simple means of determining the acidity of paper, as well as a relatively inexpensive deacidification process. At this time, most of this work involves single documents and maps, but large-scale preservation will require new processes. The W. J. Barrow Research Laboratory of Richmond, Virginia, has developed a spray process for treating books, and it is hoped a quicker process such as submerging the entire volume or gaseous deacidification can be developed. The optimum combination of temperature and humidity and the ability of modern engineering to attain these conditions will require additional study if the preservation of library materials is to be successful on a large scale. The desirable chemical composition of binding materials and adhesives is also under study.

The Library has made considerable progress in converting its large motion picture film holdings from dangerous cellulose nitrate to a safety film base. Copying and cleaning of sound recordings in danger of deterioration will increase in the coming years. Research in this area will involve use of ultrasonic techniques for cleaning discs; optimum storage conditions for magnetic tape; relative permanence of various recording media, such as magnetic tapes and vinyl discs; and problems of use versus archival storage. The Library is acutely aware of its obligation to preserve for future generations its visual and audio records, involving the thousands of photographic prints and negatives, millions of feet of motion picture film, and thousands of disc and tape recordings in the Library's collections. Because the preservation of a volume's content is now being accomplished through microfilming, the longevity of microforms is of major concern to the Library. Better film and image materials, and conditions of storage will command considerable attention.

It is hoped that through research and experimentation, means will be found and will be applied effectively to save the meaningful and lasting records of our intellectual heritage.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Alice D. Ball
Executive Director
United States Book Exchange, Inc.
May 22, 1967
Appendix G

The United States Book Exchange, Inc., known as USBE, occupies a unique place in the American library scene. It is a successfully self-supporting cooperative venture, devised by librarians to absorb and refine one of the most valuable of the by-products of American librarianship: the millions of useful surplus periodicals and books which cannot be used by the original owning institutions nor profitably disposed of through sale or direct exchanges, and which cannot be usefully passed on to other institutions without going through a refining process.

The Basic USBE Operation: Past, Present, and Future

In eighteen years, member libraries have poured in to the USBE clearing house more than twenty-one million publications. (Table 1) After receiving, sorting, evaluating, and processing-- cataloging and shelving useful periodicals and books, discarding those of no value to libraries, -- USBE has (by May 1, 1967) returned seven million publications to its members in response to their specific requests, (Table 2) and has built up a stock which now averages four million items.

Although the basic exchange operation has always been self-supporting, non-profit charges for service and lack of reserve capital have somewhat limited USBE's ability to expand. A new fee schedule, initiated January 1, 1967, is expected to allow the necessary margin for more rapid expansion. (Table 3)

The growth which is now beginning will involve both the number of member libraries and the quantity of surplus publications USBE can receive and disseminate. Of 11,600 academic and special libraries listed in the current American Library Directory at least 5,000, plus perhaps 150 larger public libraries, are of a size, type, and character to be able to make profitable use of USBE services and the research publications they involve. A four hundred percent increase from USBE's present U.S. - Canadian membership of 1,350 libraries can raise the allotment of publications to two million publications annually. Such a distribution would require a stock of six to eight million items and an annual intake of up to twelve million. Such a figure is far from visionary: calculation of the total extent of surpluses in present and prospective member libraries, plus other non-member or non-library sources, indicates that twenty million publications a year may be a minimum estimate of the total which could become available.

As the number of publications received increases, USBE will continue to discard a sizable percentage surplus to the needs of American libraries. We wish we could announce that there is immediate hope of using many of these in a resumption of USBE's large-scale distribution to libraries abroad, through which more than two and a half million publications were disseminated from 1950 through 1963. (Table 2, second column and 1949-53 in third column). Unfortunately, there is no prospect so far of funds to match those through which the Agency for International Development paid the fees and shipping charges for ten years of USBE service to 1,750 foreign libraries.

At present USBE is distributing 100,000 publications abroad to 200 libraries which can arrange to pay the fees and costs involved. This means that possibly two percent of the foreign institutions which could use USBE are receiving its services.

USBE's View of Its Future

For a year the USBE Board and staff have been intensively studying its probable and possible future expansion, with the assistance of a Special Advisory Committee. The first problem to be solved was that of a sounder financial base for the exchange services, which we believe has been provided for.

The next most pressing problem is to find a means for channeling publications to libraries abroad. USBE no longer finds the lack of a large foreign membership of critical financial concern, but lack of USBE services is critical to foreign libraries. Moreover, American libraries continue to amass surpluses beyond American needs. U.S. area studies programs need the foreign publications which an enlarged exchange program with libraries abroad could produce. Finally, the President's national policy for increasing the international flow of publications is being neglected in an area in which it could be economically and effectively implemented.

On its own part USBE has been attempting, so far without success, to find sources of funds to make possible a resumption of wide distribution abroad. Our last letter from AID is moderately encouraging. As an alternative plan, USBE has discussed and will survey possibilities in a plan to distribute publications in selected bulk lots to centers abroad for dissemination to libraries in their own geographic areas.

USBE keeps in touch with other programs, particularly those of the Asia Foundation, the Rockefeller Foundation, and the International Relations Office of the American Library Association. The plans of the IRO for contractual connections with the Agency for International Development may make it possible for USBE to increase its distribution abroad under a subcontract. USBE is also keeping abreast of the development of the new International Books Institute, whose Executive Director toured USBE last month in response to our invitation and the recommendations of the Inter-Agency Book Committee.

Beyond this primary concern for increasing the international flow of publications, there are other areas in which USBE looks to extend as well as expand its services. Subject and geographical specialization beyond what we can now offer, extended bibliographical services in serials acquisitions, increased handling of special collections of books, contractual services to individual libraries, are all possibilities to be studied. As a library service agency USBE is both capable of and anxious to respond to the acquisitions needs of libraries and the research community wherever and whenever possible.

There may be opportunities for USBE to perform other kinds of services for American librarianship, and to make useful some of the results of its processes and experiences. A few suggestions are attached as an Appendix. USBE will hold itself open as much as possible for use to or assistance in any programs where its experience, character, and resources are appropriate.

APPENDIX

ITEMS FOR CONSIDERATION

1. USBE Bibliographical Records

In controlling its flow of publications, USBE has developed for its own use systems of records which contain extensive bibliographical information, particularly for serials. Inasmuch as USBE's collections plus eighteen years of distribution represent a larger total than that of any serial collection in the world, these records in themselves can be considered a national resource. Although they are not now geared for any use except USBE's, they could be arranged to serve a wider use in any appropriate future project.

If the national serials data program now under study becomes a reality, USBE itself will be interested in revising its records systems to conform. Assisting its member libraries to realize the goals of that program would benefit USBE by forwarding the more efficient acquisition of serials.

2. USBE Relationship with Other Exchanges in the United States

There are several exchange networks in the United States operating among special groups, of which the largest is that of the Medical Library Association. In 1960 USBE called together a national meeting of these networks, and will probably call a second such meeting before the end of 1968. Otherwise, keeping informally in touch appears to be as effective as is necessary for the operations of all concerned. Coordination of bibliographical records might be useful at some later date.

Among large libraries, particularly the national libraries and those of universities, direct exchanges with other single institutions have long been a means of combining acquisitions with public relations, and, in the last thirty years or so, with the disposal of surpluses. Because of its experience and success in the handling and dispersal of large numbers of surplus publications, USBE could provide economy to individual institutions

such as the National Library of Medicine by undertaking the job of distributing their surpluses for their own purposes, absorbing any remaining items into the regular USBE distribution. USBE has made no formal proposal to any library for such an arrangement.

3. A National Information Center?

As a result of American publishing abundance and foreign library needs, there has been ever since World War II a two-way flood: of begging letters from abroad answered by gifts of publications from this country. Too often the results have been painful on all sides: unusable books sent, recipients unprepared to make use of good books, worthy petitioners neglected, American libraries (and other institutions) worn out with petitions. Although this is not a library problem entirely, librarians have realized for years that an information center would help to channel proper gifts to appropriate recipients. USBE has records and experience useful to such a center, which might be appropriately administered by the Washington branch of ALA-IRO or by a national exchange center if one were established.

4. A National Exchange Center?

Although Unesco's early hopes for a worldwide network of national exchange centers have not yet been realized, there are centers of varying capacities and responsibilities in countries throughout the world. In the United States, various parts of what might be the total responsibility of such a center are dispersed among USBE, the Library of Congress, the Smithsonian Institution, the Department of State and several other agencies. The recent approval by the United States of the Florence and Beirut agreements may eventually require the coordination of the various governmental and non-governmental programs under one central agency, and in such an arrangement USBE's experience and capacities would be a valuable part of the whole.

RECEIPTS OF PUBLICATIONS BY
USBE

<u>Five-Year Periods</u>	<u>Received</u>	<u>Distributed to Member Libraries</u>	<u>Estimated Inventory at End of Period</u>
1948*-52	3,896,000	462,014	2,325,000
1953-57	4,919,000	1,364,247	4,225,000
1958-62	5,745,000	2,546,288	4,050,000
1963-66 (four years)	6,500,000	2,417,361	4,050,000
	<hr/> 21,060,000	<hr/> 6,789,910	

*Although USBE began operations in 1949 it started with a stock of publications amassed in 1948 by its predecessor agency, the American Book Center for War-Devastated Libraries, Inc.

Table 2.

PUBLICATIONS PROVIDED TO MEMBER LIBRARIES
ON EXCHANGE

	TO FOREIGN LIBRARIES <u>Paying Own</u> <u>Fees</u>	<u>AID-</u> <u>PAID</u>	Total	TO U.S. AND CANADIAN LIBRARIES	GRAND TOTAL
1949	In the first five years, distribution to foreign libraries was supported partly by their own fees, partly by USIA, and partly by Rockefeller and other private funds.		9,345	27,341	36,686
1950			12,349	92,389	104,738
1951			12,767	140,990	153,757
1952			24,975	141,858	166,833
1953			<u>35,021</u>	194,774	229,795
		Sub total	94,457		
1954	38,452	15,243	53,695	185,740	239,435
1955	19,184	108,410	127,594	104,018	231,612
1956	15,084	177,515	192,599	149,071	341,670
1957	7,985	196,929	204,914	116,821	321,735
1958	11,518	194,712	206,230	114,957	321,187
1959	28,820	292,899	321,719	131,860	453,579
1960	25,788	324,176	349,964	161,454	511,418
1961	44,304	373,660	417,964	195,674	613,638
1962	34,155	418,460	452,615	193,851	646,466
1963	26,987	421,559	448,546	243,506	692,052
1964	98,168	---	98,168	486,034	584,202
1965	97,674*	---	97,674	457,294*	554,968
1966	<u>113,125*</u>	<u>---</u>	<u>113,125</u>	<u>473,014*</u>	<u>586,139</u>
GRAND TOTALS OF EXCHANGE DISTRIBUTION	561,244	2,523,563	3,179,264	3,610,646	6,789,910

*Estimated according to proportion of earnings

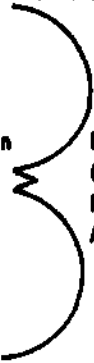
USBE FEES AND CHARGES
(Excerpted from Operating Instructions Leaflet)

- 2.2. The Membership Fee is \$12.00 per year, charged on a calendar year basis. Libraries which have difficulties in joining membership organizations can be billed for the annual fee on a subscription basis.
- 2.5. HANDLING FEES which are charged on all items ordered and received by each member library are as follows:
- 2.5.1. For the first issue supplied of each title requested (whether the issue is separate or forms part of a complete volume, bound or unbound) \$1.00
- 2.5.12. For each subsequent issue of the same title, if ordered at the same time: .60
- 2.5.13. EXCEPT: for each recent issue (published within 12 months of date of request): 1.00
- 2.5.2. For each Annual Volume (of transactions, proceedings, etc.) 2.00
- 2.5.3. For each book or monograph 2.00
- 2.5.5. Rush Searching Charge
For search within 48 hours on requests marked "Rush" or telephoned in: extra charge per title whether or not any items supplied: 1.00
- 2.5.7. These fees are charged on all items ordered and received by any member library, and cannot be cancelled unless USBE makes an error.
- 2.6. SHIPPING OR MAILING CHARGES are charged in addition to handling fees on each shipment.

THE UNITED STATES BOOK EXCHANGE, INC.

The United States Book Exchange, Inc. (USBE) is a private, non-profit, self-supporting corporation, engaged in co-operative exchange and other services to libraries on a national and international scale. USBE was incorporated in the District of Columbia in 1948 and began operations January 1, 1949.

The associations and organizations which sponsor USBE and form its corporation are as follows:

- | | | |
|---|---|--|
| 1. American Association of Law Libraries |  | 11. American Council of Learned Societies |
| 2. American Documentation Institute | | 12. American Council on Education |
| 3. American Library Association | | 13. Association of Research Libraries |
| 4. American Theological Library Association | | 14. Engineers Joint Council |
| 5. Association of American Library Schools | | 15. Library of Congress |
| 6. Catholic Library Association | | 16. National Academy of Sciences-National Research Council |
| 7. Medical Library Association | | 17. National Agricultural Library |
| 8. Music Library Association | | 18. National Library of Medicine |
| 9. Special Libraries Association | | 19. Smithsonian Institution |
| 10. Theatre Library Association | | 20. Social Science Research Council |
- MEMBERS OF THE COUNCIL OF NATIONAL LIBRARY ASSOCIATIONS

The Officers and Board of Directors of USBE for 1967-68 are as follows (numbers indicate the organization each represents on the Corporation; individual Corporation representatives not on the Board are not listed):

PRESIDENT and CHAIRMAN OF THE BOARD Elizabeth Ferguson, Librarian, Institute of Life Insurance (9)
VICE PRESIDENT John G. Loronz, Deputy Librarian of Congress (15)
SECRETARY Bella E. Shachtman, Assistant Director, Technical Services, National Agricultural Library (17)
TREASURER Roland E. Kircher, Librarian, Wesley Theological Seminary (4)

MEMBERS OF THE BOARD

Neal R. Marlow, Dean, School of Library Service, Rutgers University (at large)
David Kaser, Director, Joint University Libraries (at large)
Robert B. Lee, President, Engineers and Scientists People to People Committee (14)
Robert Quick, Director of Publications, American Council on Education (12)
Robert D. Stevens, Acting Dean of Library Activities, University of Hawaii Libraries (at large)
Paul Wasserman, Dean, School of Library and Information Services, University of Maryland (at large)

IMMEDIATE PAST PRESIDENT Samuel Lazarrow, Chief, Serial Record Division, Library of Congress (7)

EXCHANGE MEMBERSHIP

On April 1, 1967, USBE was serving 1,571 member institutions, of which 1,344 are in the United States and Canada and 227 in other countries.

OTHER LIBRARY SERVICES

USBE is open to performance of gift and exchange programs, or other related services, through agreements providing the necessary funds and receiving the assent of the USBE Board of Directors.

USBE ADDRESS

THE UNITED STATES BOOK EXCHANGE, INC.
3335 V (Vee) Street, N. E.
Washington, D. C. 20018

ADMINISTRATIVE OFFICERS

Alice Dulany Ball, Executive Director
Mrs. Elaine Austin Kurtz, Associate Executive Director
Eugene T. McGuire, Assistant Director for Operations
Gordon D. Cooke, Chief of the Serials Division and Assistant Director

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY

Germaine Krettek
Director, Washington Office
American Library Association
May 22, 1967
Appendix H

ALA ACTIVITIES IN THE FIELD OF LIBRARY LEGISLATION

The American Library Association at the present time is involved in extensive Federal legislative programs for libraries. In addition, the Association maintains active relations with the States in their efforts to obtain either new or improved laws for their libraries. These activities in the field of legislation have developed naturally and gradually as a result of the serious deficiencies which have been found to exist in American library services and facilities--school, college, university, research, State, and public libraries.

Although the American Library Association, a non-profit, professional organization, was founded in 1876, nearly a century ago, "to promote library service and librarianship," its direct action on Federal library legislation began about 30 years back, and then in a limited way. Federal financial assistance to libraries has gone from nothing in 1936 to authorizations of \$1.4 billion in 1966, for a 3 to 5-year period, for the four major library programs.

In its first half century, the Association busied itself with such important professional matters as establishing cataloging rules and classification principles, college and reference work, activities in the field of children's reading, training and certification of librarians, school libraries, creation of a Publishing Board to prepare and print many needed library aids. In its meetings and in its publications, the ALA proclaimed again and again that libraries were essential tools in the education of a democracy.

During those years, although not unaware of the significant deficiencies in existing library service, it was not until 1926 that the ALA Extension Committee made the alarming report that 45 million people, most of them in rural areas, were without public libraries. Later studies showed such distressing facts as in 1936 the per capita expenditures for public libraries varied from \$1.08 in Massachusetts to \$0.02 in Arkansas and Mississippi; and among the cities, from a low of \$0.13 to a high of \$2.43 per capita for public library expenditures. It was further discovered that State grants for local public libraries existed in only 13 cases and that "not more than 10 or 12 States had succeeded in establishing State library service of the first rank, with many States whose library activities have been almost completely lacking or definitely ineffective." (Joeckel Library Service, 1938.)

These and other deplorable statistics served as the basis for the ALA's original attack on solving public library deficiencies, which ultimately were brought to the attention of the Congress. They also were the background of a graphically illustrated brochure in color, which proved highly effective in convincing persons of the plight of public libraries: "Equal Chance: Books Help to Make It." (ALA, 1936.)

It was in the 1930's that special stress was placed on county and regional libraries as a partial answer to the problems of the public library. One summer institute was developed on this question, and we had the results in Library Trends (edited by Louis R. Wilson, 1936), in which some 20 papers were presented. During that period of 10 years, experiments, surveys, studies and demonstrations in libraries were undertaken so that a body of data was evolved on which to act. To forward the program, a Library Development Fund of \$88,000 was raised by voluntary donations from 8,100 individuals to that a National Relations Office in Washington could be opened on a temporary basis to promote Federal legislation in support of public libraries.

During this search consideration of the public library situation in the 1930's, attention was given also to the status of school libraries, college libraries, and research libraries. These types likewise showed deficiencies in number of volumes, expenditures and unequal distribution in various parts of the Nation. The advocates for these groups thought, likewise, of possible assistance from the Federal Government. The status of libraries of the time was set

forth solidly by L. R. Wilson's "Geography of Reading" (A. L. A. and University of Chicago Press, 1938). Librarians also paid attention to the tax tables of L. R. Chism, prepared to indicate the per capita tax paying ability of the various States in connection with possible payments for public education.

Librarians had sufficient facts on the appalling situation regarding libraries and were generally aware of the steps necessary to remedy the deficiencies, but they had also a national disaster to face: the Great Depression of 1930-38. People are not likely to react cordially to spending money even for good and needed purposes when confronted by calamitous financial losses. Based on a national income of \$81 billion in 1929, the estimated loss of national income during the 1930-38 period was \$132.6 billion.*

From the Library Services and Construction Act of 1966 Fact Sheet (see attachment), which the ALA Washington Office has been distributing this year to the members of the 90th Congress, one can obtain the main provisions, authorizations, and justifications of this legislation. This sheet of information is a far cry from the simple proposal for Federal financial aid to rural public libraries back in the late 1930's. It is the culmination of some 30 years of effort, heartbreaking frustrations, cliffhanging moments, and achieved success through persistence and perseverance by Congressmen, friends of libraries, librarians, friendly organizations, and the American Library Association.

A detailed account of the history of the public library act would take too long, but a few highlights of the main developments may be helpful in understanding the legislative problems involved. Armed with the fact of existing public library deficiencies in the States, with the fact of inequality of tax-paying ability among the States and localities, and with the logical conclusion that adequate public library services and facilities are so essential to education in this modern age and to a properly functioning democracy, public libraries become not only a matter of State and local interest, but also of national interest. Before that time, the prevailing attitude was that libraries were a matter of State and local concern but not a concern of the Federal Government.

*Morris Encyclopedia of American History, p. 512

Following the reports on public libraries of the President's Advisory Committee on Education in 1938, the Harrison-Thomas-Fletcher bill proposed Federal aid to education, and included a Title which recommended Federal grants to rural public libraries. Representatives from the ALA testified on the bill, but general aid to education did not have a chance at that time. Then came the national defense efforts which engaged the people of the United States and finally our entry into World War II on December 8, 1941.

Later on, in 1944, during the war, the ALA made efforts to get legislation drawn up which would permit the surplus army camp libraries to be transferred to rural areas, in event of cessation of hostilities.

The pressing need for ALA representation to be near the scene of national activities led to the establishment of the Washington Office on October 1, 1945.

This event was followed by introduction in 1946 (79th Congress) of the Public Library Demonstration Bill by Representative Emily Taft Douglas and Senator Lister Hill. This bill was based on a draft revised by the ALA Washington representative from notes and a draft which the Legislative Reference Service of the Library of Congress had assisted in preparing. It was patterned after the successful demonstration projects in Louisiana. This bill would have allotted \$40,000 to each State plus from \$40,000 to \$100,000 to be matched on a 50-50 basis by State or local funds for the purpose of providing demonstrations for adequate public library service in areas not adequately served. The bill was reported on favorably by the Senate Committee on Labor and Public Welfare and the House Subcommittee on Education, but the Congress adjourned before any final action was taken.

The bill was reintroduced in the 80th Congress, passed the Senate on the unanimous consent calendar February 25, 1948, and was reported out favorably by the House Subcommittee. But no further action was taken on it. In the 81st Congress, the library legislation got to the floor but was defeated after a five-hour debate, 161 to 164, March 9, 1950.

In the 82nd Congress, the bill was revamped. It authorized annual appropriations of \$7.5 million for 5 years to be granted the States on a matching basis. Each State was to receive \$40,000, and

its share of the balance in proportion to its rural population as compared with the total population of the United States. This money was to be matched on a basis of the ratio which the State's per capita income bore to the per capita income of the United States. The States were no longer restricted to demonstrations but each was to submit a plan to improve its library service and to have it approved by the Commissioner of Education. The State would administer the plan and could not reduce its expenditures for public library services by utilizing Federal money. Federal control was not allowed. The bill was reported out favorably but no floor action was taken.

In the 83rd Congress, an increased number of sponsors, many of them very influential, introduced the library services bill again, but it still failed to get to the floor for a vote. The House Education and Labor Committee and the Senate Labor and Public Welfare Committee held up all legislation which dealt with federal aid to education.

The 84th Congress was another story. Senators Hill, Aiken and Douglas sponsored the same bill, joined by 15 other Senators, many of whom still figure prominently in the activities of the Congress today. In the House, 28 Representatives introduced identical bills. After hearings, the House Committee on Education and Labor reported it favorably by a vote of 20 to 9, but for 9 months it got stalled until the Rules Committee finally cleared it for Floor action. At the end of three and one-half hours of debate--at long last--it passed. This action stirred the Senate subcommittee which had before it the bill introduced by Senator Hill and 17 other Senators. The subcommittee made a favorable report to the full Senate Committee, which likewise acted favorably on the measure without amendment. The Senate passed it on the unanimous consent calendar, May 14, 1956. President Eisenhower then signed the measure into law June 19, 1956 (Public Law 84-597). Ten years of unflinching but anxious effort had been crowned with success.

The fight for appropriations then began and continues to this day. For the first fiscal year (July 1, 1956-June 30, 1957), only \$2,050,000 was appropriated and it was not until the last year of the Act (FY 1961) that the full authorized amount of \$7.5 million was appropriated.

Two more landmarks in this public library legislation must be pointed out. One is the harrowing experience involved in the extension of the original Act. It was evident that the legislation had become one of the most successful Federal programs, that essential appropriations had been considerably short of the already too meager authorizations for the five years of its existence, and that much needed library services were still lacking. In 1960, on this basis, 52 House Members introduced bills, and 55 Senators co-sponsored bills to extend the life of the public library act for another 5 years. In the House, Rep. Carl Elliott (D. -Ala.) introduced the first bill on January 6, the day Congress convened, was chairman of the subcommittee which held the hearings, and generally bore the brunt of the fight for the measure. Senator Hill managed the Senate bill which he introduced on January 14. S. 2830 passed the Senate without a dissenting vote on May 26. The Administration was backing the legislation for the first time since the original bill was introduced in 1946.

The House bill (H. R. 12125) received favorable committee action on May 12, but the Rules Committee denied a rule to bring the measure to the floor--the vote being a tie, 6 to 6. After exhausting every means of getting a reconsideration of the bill, it was decided to try to by-pass the Rules Committee and to get a favorable vote under Suspension of the Rules. This is a difficult situation because the passage of a bill under these circumstances requires that a quorum of the entire House membership be present and that two-thirds vote affirmatively. The late Representative Fogarty stayed up all night on July 2, and at 5:30 a.m., he obtained the consent of the then Speaker Rayburn to call up the extension of the library act under Suspension of the Rules on August 22, 1960, the last day that bills could be considered under the Suspension Calendar, before final adjournment of the Congress for the Session.

At the end of 40 exciting, nerve-wracking minutes of debate, the Speaker banged his gavel and the vote was taken. A division was demanded, whereupon Representatives stood up, 190 in favor and 29 opposed. The Library Services Act was extended to June 30, 1966. President Eisenhower signed the bill on August 31 (P. L. 86-679).

Another landmark might be noted when each national party platform in 1960 for the first time in United States history had specific mention of libraries among the planks. The Democratic platform pledged to "further Federal support of libraries," and the Republic platform declared, "Support of library services to extend it to all our people." A representative of the American Library Association had presented the case for libraries before the platform committee of each party.

The next great development came in 1963 when the Library Services Act became the Library Services and Construction Act. It eliminated the 10,000 population and limitation and provided in a separate title construction funds for the badly needed buildings.

This measure was actually being considered on the floor of the Senate on Friday, November 22, 1963, when there was a sudden cessation and an unusual commotion around the Clerk's desk. The news had arrived that President Kennedy had been shot! The Senate adjourned immediately. On the following Tuesday, November 26, the library measure was the first to be taken up. After a brief debate, lasting for one hour only, the Senate overwhelmingly approved the bill, 89-7, a resounding bipartisan victory. The House took no action in that session, but did take up finally the library measure, on January 21, 1964, and passed it after 5 hours of spirited debate with amendments, 254 to 107. President Johnson signed the bill on February 11, 1964 at a White House ceremony.

Then in 1966 the amended Library Services and Construction Act, as described in the Fact Sheet, referred to at the outset of this manuscript, was passed by a vote of 336 to 2 in the House after four days of hearings and by a unanimous voice vote in the Senate, after one morning of hearing. Some idea of the money authorization for this Act in FY 1968: Public library services, \$45 million; public library construction, \$50 million; inter-library cooperation, \$7.5 million; State institution library services, \$7.5 million; library services to the physically handicapped, \$4 million. The total authorization for the LSCA over the next five years is \$700 million.

In the battle for Federal aid, public libraries started first and came up with the remarkable accomplishments which have been described. School libraries, college libraries and medical libraries followed in time with substantial authorizations. Their success has been brought about in part by the surge of the growing population, the explosion of knowledge, a resolution of the church-State issue, and recognition of the fact that libraries are not only a matter of concern to the locality and State, but also to the Nation.

The National Defense Education Act, originally passed in 1958 and extended in 1964, spurred on by the challenge of the Soviet Union, aimed to strengthen instruction in the crucial areas of science, mathematics, modern foreign languages, English, geography, and economics. The Act helped school library resources and the training of school librarians. In 1965, North Carolina, for example, spent from N. D. E. A. funds, Title III, \$4,718,000 for printed and audiovisual material. Another law related to national defense has been the School Assistance in Federally Impacted Areas, a law which is not directed at helping school libraries, but does so nevertheless.

The Elementary and Secondary Education Act (PL 89-10 and PL 89-750) is the important one for school libraries. It is designed to strengthen and improve educational quality and opportunities in our elementary and secondary schools and to extend aid to school-related activities. It includes a grant program for the acquisition of school library resources, textbooks, and other printed and published instructional materials for the use of children and teachers in public and private elementary and secondary schools. In FY 1966 the full authorization of \$100 million was appropriated. In fiscal 1967, the Title II appropriation was increased to \$102 million and the territorial share to 3%, although the authorization was \$128,750,000. For FY 1968 the authorization is \$154.4 million but the budget request is for \$105 million only. Title I for disadvantaged areas, Title III, and Title VI also helped school libraries.

The Higher Education Act (PL 89-329 and PL 89-752), intended to strengthen the educational resources of our colleges and universities and to provide financial assistance for students, includes, under Title II, support for (a) college library resources, (b) library training and research, and (c) cataloging and other bibliographic

services. Due to a complicated legislative situation in 1965, funds were not available until late in the fiscal year, and then only \$11,300,000 was appropriated although \$70 million was authorized. For the current fiscal year, \$35.3 million was appropriated, whereas \$71.3 million is authorized for fiscal 1967.

The Act carries for Part A--College Library Resources--an authorization for FY 1968 of \$50 million, but the budget recommendation is only \$25 million. For Part B--Library Training and Research, it carries an authorization for FY 1968 of \$15 million, but the budget recommendation for FY 1968 is \$11.8 million (\$8.25 million for training and \$3.55 million for research). For Part C--Strengthening College and Research Library Resources, it carries an authorization for FY 1968 of \$7.7 million, but a budget recommendation in FY 1968 of only \$4 million.

While on the subject of higher education, we must remember, too, that funds for the construction of academic facilities, including libraries, were provided in the Higher Education Facilities Act of 1963 and are also included in the Higher Education Amendments of 1966 (P. L. 89-752). It is estimated that more than \$168 million in grants were distributed in fiscal 1966 for construction of library facilities.

Depository Library Act of 1962 (P. L. 87-579). This revised law represents the first change in this area since 1895. The first Act provided for the distribution of Government documents regularly to a fixed list of libraries designated as depositories, among which were ones which had been named originally by the Senators and Representatives. The purpose of the new measure was to establish a more comprehensive program for making Government publications available to citizens, including scientists, educators, businessmen, students and housewives. The new legislation endeavors to do this by increasing the number of depository list publications printed, not at the Government Printing Office, but by the departments and agencies in their own department and field plants.

The A. L. A. took an active part in developing and promoting this needed legislation because of its clear benefits to the users of the valuable printed information issued by the Federal Government. In view of the vast research and other programs undertaken by the departments and the agencies, this extension of the availability of such knowledge had become urgent.

The A. L. A. has testified regularly in support of sufficient appropriations to fully implement the enlarged activities under the new Act. It will continue to do so. Substantial progress has been made in implementing some sections of the new law but in other respects the pace has been distressingly slow. After four years the full benefits of the law have not yet been achieved due somewhat to a lack of urgent interest on the part of the agency involved in its administration.

A paper on the depository library program is being prepared and will be submitted to the Commission by a special ad hoc committee currently studying this problem.

Although the A. L. A. had no part in the introduction of the Medical Library Assistance Act (P. L. 89-291), it nevertheless supported its passage and subsequent appropriations. This legislation is of special concern to A. L. A.'s Hospital and Institutional Libraries Division. This law establishes several categories of aid for projects to improve medical library services and facilities throughout the country. Grants are authorized for (1) construction, (2) training, (3) special scientific projects, (4) research and development, (5) improving and expanding basic medical library resources, (6) establishment of regional medical libraries, and (7) support of biomedical scientific publications. In addition, the National Library of Medicine is authorized to establish regional branches. The appropriation last year was \$4,175,000, included in a last-minute supplemental money bill. For this current fiscal year, \$13.8 million was appropriated although \$21 million is authorized by law.

In addition, the Federal Government assists libraries through its law on the imports of foreign printed material, on postal rates on books and printed material sent by libraries as interlibrary loans, surplus property, and in other ways. The preliminary draft of the 1967 ALA Bulletin articles on "Federal Library Legislation, Programs, and Services", prepared by the Library Services Division of the USOE

and edited by Henry T. Drennan, summarizes the federal legislation relating to libraries currently on the statute books. A list of existing Federal laws affecting libraries is also given on pages 19-20 of the Federal Legislative Policy of the American Library Association, 1967. (Attachments)

In the present session of Congress (90th Cong., 1st Sess.), the A. L. A. to date has presented testimony or filed statements on the Elementary and Secondary Education Amendments of 1967, the Higher Education Amendments of 1967, appropriations for the various library acts for fiscal year 1968, on the Informational Media Guaranty Program, and the revision of the Copyright law. The attached chart of pending legislation indicates other bills which are of interest to libraries.

The A. L. A. Washington Office

The A. L. A. Washington Office is the agent for carrying out the legislative program of the Association. It does not make the policies, but endeavors to put through the legislative objectives which the A. L. A. Council, the governing body of the Association, establishes. The Washington Office also assists in carrying out the program which the Committee on Legislation formulates at frequent intervals after consulting and cooperating with the appropriate division committees, and other sources. For a guide, the Committee has developed the Federal Legislative Policy of the A. L. A., first adopted by Council on January 29, 1959, and revised January 26, 1965 and January 12, 1967.

In order to understand the success to date of the A. L. A. legislative programs, and the work and problems of the A. L. A. Washington Office, some of the following points should be taken into account:

1. The location of the office is very strategic. It is on Capitol Hill, one block south of the Library of Congress, one to three blocks, respectively, from the three House Office Buildings. From our windows can be seen the Capitol a few blocks away, and one can tell by the American Flags flying or not flying whether or not the two bodies are still in session. The two Senate Office Buildings are to the north, the length of the Capitol away, about three city blocks.

2. On each legislative measure, proposed or enacted, the Washington Office endeavors to get all the facts available from documents, reports, statistics, special questionnaires, newspapers and periodicals, interviews, and other sources, including data from the people back home.

3. Personal visits are made regularly to members of Congress to inform them succinctly on the problems in question, to show them specifically how the proposal will or has affected their constituents, and to get their reactions. Likewise, cordial relations are established with their staffs. Fact sheets, letters and other data are supplied as a follow-up to the Congressmen and the key staff members. Bi-partisan support is sought.

4. Outstanding witnesses for the hearings are selected for various library legislative measures. Although individual testimony is not controlled, it is checked so as to fit into the general pattern and to give an overall view of the needs and remedies. A pre-hearing conference of the testifiers is held so that the whole area of the legislative proposal can be gone over and possible questions from the Congressmen anticipated.

5. Leaders interested in the development of school, college, public and other types of libraries are kept informed of the situation at the national level by the ALA Washington Newsletter, special memoranda, night telegrams, long distance telephone calls, speeches before association meetings, and other means. The ALA Bulletin has each month an article on national library developments. These people are urged to communicate briefly and informatively with their Senators and representatives by personal visits, letters, and other means.

6. The support of outside non-library organizations has been obtained for the library legislation. This group includes such ones as the AFL-CIO, National Grange, Farmers Union, American Vocational Association, General Federation of Women's Clubs, Cooperative League, National Educational Association, International Association of Machinists, National League of Cities, Congress of Parents and Teachers, and many others, who testify or who file statements.

7. Continuous calls are made to the various executive departments and agencies of the Federal Government in order to keep them informed of library problems and to learn of any questions with implications for libraries.

8. Attendance at and participation in meetings and conferences of national organizations has been another means of keeping the cause of libraries to the forefront.

9. Prompt thank-you letters have been sent to senators and representatives who supported the measure in committee or on the floor with special words to those who spoke and presented statements.

Presidential Endorsements of Libraries

In 1963, President John F. Kennedy said in his Education Message to Congress: "Education is the keystone to the arch of freedom and progress. . . . for the individual, the door to the school house, to the library and to the college leads to the richest treasure of our open society. . . ."

In 1965, President Johnson devoted a good part of his Education Message to the needs of school and college libraries, and said among other things, "We must build libraries in every area." In his 1967 statement on National Library Week, he said "A library is far more than a collection of information. It is a reservoir of man's spirit, through which we preserve and perpetuate the dreams and the achievements of humanity."

A good statement of approval of libraries came from the late John E. Fogarty, Chairman of the House Appropriations Subcommittee, who said: "I am convinced that libraries are the touchstone of American education."

From the foregoing pages, it is evident that Federal assistance now reaches consumers of services at public libraries, school libraries, college libraries, university libraries, research libraries, and other types of libraries. The laws authorizing the services and the facilities have been passed independently and at various times.

They have come about because thinking Congressmen, discerning educators, civic leaders, and a gradually growing portion of the general public, as well as dedicated librarians, have realized that adequate libraries are essential to the progress and success of the Nation, educationally, economically, scientifically, culturally and in other ways.

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SELECTED BIBLIOGRAPHY

American Library Association

Federal Legislative Policy of the American Library Association. Adopted January 12, 1967. Chicago, American Library Association, 1967.

Chicago University

Library Trends: Papers Presented before the Library Institute. August 3-15, 1936. Edited by Louis R. Wilson. Chicago. University of Chicago Press, 1937.

Daniel, Hawthorne

Public Libraries for Everyone: Growth and Development of Library Services in the United States, Especially Since the Passage of the Library Services Act. New York. Doubleday and Company, 1961.

Danton, Emily Miller

Library of Tomorrow. Chicago. American Library Association, 1939.

Educational Policies Commission

Federal Activities in Education. Washington, D.C. National Education Association, 1939.

Illinois University. Graduate School of Library Science.

Federal Legislation for Libraries: Papers Presented at an Institute Conducted by the Graduate School of Library Science. November 6-9, 1966. Edited by Winifred Ladley. Champaign, Ill. University of Illinois Book Store, 1967

Joeckel, Carleton B.

Library Services: Prepared for the President's Advisory Committee on Education. Staff Study No. 11. Washington. Government Printing Office, 1938.

Study Committee on Federal Responsibility in the Field of Education.

Federal Responsibility in the Field of Education. Washington. Commission on Intergovernmental Relations, 1955.

U.S. Office of Education

Federal Education Agency for the Future: Report of the Committee on Mission and Organization of the U.S. Office of Education. Washington. Government Printing Office, 1961.

U.S. Office of Education

Statewide Long-Range Planning for Libraries: Report of Conference Sponsored by Library Services Branch. Edited by H.A. Carl, September 19-22, 1965. U.S. Department of Health, Education, and Welfare, 1966. Washington, D.C.

Wilson, Louis R.

Geography of Reading. Chicago. American Library Association and University of Chicago Press, 1938.

**The Library Services and Construction Act of 1966
as Amended by P.L. 89-511 (July, 1966)**

Purpose

This legislation is helping to meet the urgent and essential public library needs of people of the United States in the fields of education, science, technology, business, culture, international relations, everyday living and other aspects of human endeavor. It benefits adults, young people, and children, at all levels of educational attainment and all levels of economic status. The Act helps the States and local communities to remedy in part some of the glaring deficiencies which still exist in public library services and facilities of our country.

It encourages much needed cooperation among all types of libraries, provides sadly lacking library services to those who live in State institutions, and to the physically handicapped who cannot read or use conventional printed materials.

Authorization Dates

Fiscal year 1967 through fiscal year 1971.

Main Provisions

Title I - Services

The funds which must be matched may be used for books and other library materials, equipment, salaries, and other operating expenses, and for the administration of the State plan for services. The objective is to promote the further extension of public library service to communities now without such services, or with inadequate services.

Authorization FY 1968	\$45 million
Budget recommendation, FY 1968	<u>\$35 million</u>
Decrease from authorization -	\$10 million
Authorization FY 1967	\$35 million
Appropriation FY 1967	\$35 million

Each State, Puerto Rico, and the District of Columbia, in order to participate in Title I must qualify for a minimum Federal allotment of \$100,000; American Samoa, Guam, and the Virgin Islands, each for at least \$25,000. Maintenance of State and local effort is required.

Title II - Construction

Funds which must be matched may be used for public library construction and for the administration of the State plan for construction. "Public library construction" is defined as meaning the construction of new public library buildings and the expansion, remodeling, and alteration of existing buildings for use as public libraries

and the initial equipment of such buildings (but not books). Architects' fees and the cost of the acquisition of land are also included in the definition.

Authorization FY 1968	\$30 million
Budget recommendation FY 1968	<u>\$27.185 million</u>
Decrease from authorization	\$22.815 million
Authorization FY 1967	\$40 million
Appropriation FY 1967	\$40 million

Each State, Puerto Rico, and the District of Columbia, is entitled to a basic Federal allotment of \$80,000 for each year; American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands, each to an allotment of \$20,000.

Title III - Interlibrary Cooperation

Funds may be used for the establishment and maintenance of cooperative networks of libraries at the local, regional, State, or interstate level. Interlibrary cooperation may include State, school, college, university, public, and special libraries, working together to provide maximum effective use of funds in providing services to all library users.

Authorization FY 1968	\$7.5 million
Budget recommendation FY 1968	<u>\$2.375 million</u>
Decrease from authorization	\$5.125 million
Authorization FY 1967	\$5 million
Appropriation FY 1967 (for planning only)	\$375,000

Each State, Puerto Rico, and the District of Columbia, is entitled to an allotment of \$40,000 each year; American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands each to an allotment of \$10,000.

Title IV - Specialized State Library Services

Part A. State Institutional Library Services

Funds may be used to purchase books, and other library materials, and to provide library services to (A) inmates, patients, or residents of penal institutions, reformatories, residential training schools, orphanages, or general or special institutions or hospitals operated by or substantially supported by the State, and (B) students in residential schools for the handicapped (including mentally retarded, hard of hearing, deaf, speech impaired, visually handicapped, seriously emotionally disturbed, crippled, or other health-impaired persons who by reason thereof require special education) operated or substantially supported by the State.

Authorization FY 1968	\$7.5 million
Budget recommendation FY 1968	<u>\$2.12 million</u>
Decrease from authorization	\$5.38 million
Authorization FY 1967	\$5 million
Appropriation FY 1967 (for planning only)	\$375,000

Each State, Puerto Rico, and the District of Columbia, is entitled to a basic allotment each fiscal year of \$40,000; American Samoa, Guam, and the Trust Territory of the Pacific Islands, and the Virgin Islands each to an allotment of \$10,000.

Part B. Library Services to the Physically Handicapped

Funds may be used for library services, whether through public or other non-profit libraries, agencies, and organizations, to physically handicapped persons, including the blind and the visually handicapped.

Authorization FY 1968	\$4 million
Budget recommendation FY 1968	<u>\$1.32 million</u>
Decrease from authorization	\$2.68 million
Authorization FY 1967	\$3 million
Appropriation FY 1967 (for planning only)	\$250,000

Each State, Puerto Rico, and the District of Columbia, is entitled to a basic allotment of \$25,000 each year; American Samoa, Guam, the Trust Territory of the Pacific Islands, and the Virgin Islands, each to an allotment of \$5,000.

Control

Each State library administrative agency determines the best uses to which the grants may be put, and prepares its own plan most suited to its particular needs, and submits it to the U.S. Commissioner of Education for approval.

Basis of Allotment and Matching

The Federal appropriation is allotted to each State on the same ratio as the number of its population is to the number of total population of the United States, according to the last Decennial Census. To obtain this Federal money, each State must match the amount with State and/or local funds on the basis of a ratio of the State's per capita income relative to the average per capita income of the United States. These limitations are set, however: No Federal share in Titles I, II and IV for any State, shall exceed 66 percent, or fall below 33 percent. In Title III, the Federal share is 50 percent, but in fiscal year 1967, for Titles III & IV, it is 100 percent.

A Few of the Accomplishments of the LSA and the LSCA

1. During the 1957-1964 period, almost 40.7 million people were offered public library service under the rural program.
2. About 27 million books and other library materials were purchased under State plan programs with Federal, State, and local funds during the 10-year period of the L.S.A. (P.L. 84-597 & P.L. 86-679.)
3. The stimulation of Federal funds strengthened the State library agencies so that many of them can now fulfill effectively their leadership and supporting roles to the local libraries of the State.
4. Extension and improvement of library services to rural areas has been accomplished by many methods including the establishment and expansion of larger-unit library systems at the county and regional levels, of State library regional branches, and of area cooperative arrangements.
5. A total of 487 bookmobiles was reported as purchased through the period FY 1957 to FY 1965, with the aid of Federal funds.
6. Inclusion of urban libraries within the scope of the Act in 1964 (P.L. 88-269) has resulted, among other things, in three major types of projects: (a) improvement in library services to disadvantaged communities; (b) extension of high-quality services to suburban areas; and (c) strengthening of urban library collections to be used over larger regions of a State.

A Few of the Deficiencies Still Existing In Public Library Services and Facilities

1. Between FY 1956 and FY 1966, there have been very substantial increases in public library expenditures, from \$177 million to about \$500 million, but there still are great gaps. The per capita figure of about \$2.50 in FY 1966, however, is one-half of the \$5.00 needed for adequate library service based on nationally accepted standards.
2. In 1964, the public libraries in the United States, despite greatly increased financial support, and improved library service to rural areas, were still inadequate for both rural and urban populations. In 1964, public libraries in this country needed an additional \$439 million in current operating expenses, and this figure does not include an \$850 million backlog of needs for books to meet the minimum levels of adequate service.
3. Grave shortages exist in the number of trained personnel to operate the public libraries of the Nation so that they fulfill the demands of the people.
4. Many public library buildings in the United States have become obsolete. Of the publicly-owned buildings, 33 percent were erected more than 40 years ago.
5. The great growth of knowledge and recorded facts in this modern age, together with the tremendous increase in population, are putting a severe strain on the libraries. Cooperative and coordinated efforts must be made by public libraries to obtain, store, and make available the needed information by increased availability of book and other resources, and by photographic and other electronic equipment.

HIGHER EDUCATION ACT OF 1965, TITLE II

Provisions and Justifications

Title II - College Library Assistance and Library Training and Research

A 5-year program with specific appropriations authorized the first three fiscal years - 1966, 1967 & 1968. (P.L. 89-329, as amended by P.L. 89-752.)

Purpose

Title II of HEA is designed to improve college libraries and the quality of library service throughout the Nation by providing grants for: (1) acquisition of books, periodicals, and other library materials by colleges and universities; (2) training of all types of librarians; (3) research and demonstration projects, including the development of new ways of processing, storing and distributing information; and (4) aiding the Library of Congress to acquire and catalog additional scholarly materials.

Authorization Dates and Principal ProvisionsPart A - College Library Resources

Authorization: \$50 million for fiscal years 1966, 1967 & 1968, and such sums as Congress may authorize for 1969 & 1970.

Authorization FY 1968	\$50 million
Budget recommendation, FY 1968	<u>25 million</u>
Decrease from authorization	\$25 million
Authorization FY 1967	\$50 million
Appropriation FY 1967	24.5 million

Provides grants to institutions of higher education for books, periodicals, documents, magnetic tapes, phonograph records, audiovisual materials, and other related library materials (including necessary binding). Eighty-five percent of the sum appropriated for any fiscal year is for Basic and Supplementary Grants; the remaining fifteen percent is for Special Purpose Grants.

Basic Grants of up to \$5,000 may be approved by the Commissioner of Education for eligible institutions of higher education and for each branch, located in a community different from its parent institution. To qualify for a basic grant, the previous level of expenditure for library programs must be maintained, in addition to matching the grant money on a dollar-for-dollar basis.

Supplementary Grants - From the remainder of the eighty-five percent not used for basic grants, up to \$10 per full-time student (or the equivalent) may be given in supplementary grants to institutions which have a minimum basic grant in excess of \$1,500 (minimum stipulated by conferees in H.Rept. 1178, p. 60).

Special Purpose Grants are to be made by the Commissioner to help meet institutional, regional or national library needs, either in a single college or in combinations of colleges. Maintenance of the previous level of library expenditures is required as well as matching every \$3 of Federal grant money with \$1 from the institution.

An 8-member Advisory Council on College Library Resources is authorized to assist the Commissioner in establishing criteria for making supplemental and special purpose grants.

Part B - Library Training and Research

Authorization: \$15 million for fiscal years 1966, 1967 & 1968, and such sums as Congress may authorize for 1969 & 1970.

Authorization FY 1968	\$15 million
Budget recommendation, FY 1968	<u>11.8 million*</u>
Decrease from authorization	\$3.2 million

*((\$8.25 million for training; \$3.55 million for research)

Authorization FY 1967	\$15 million
Appropriation FY 1967	7.3 million

Sec. 223 provides grants to institutions for the training of persons engaged in or about to engage in the practice of librarianship in public, school, academic, or special libraries, supervisors of such personnel, and professional personnel to train librarians. Regular sessions, short-term programs and institutes, with stipends and allowances for travel, subsistence and other expenses, are authorized. Beginning in FY 1968, institutes for school librarians previously financed under the National Defense Education Act will be transferred to this program.

The Commissioner may make grants only upon application by these institutions and only upon finding that their library training programs will substantially increase nationwide library training opportunities.

Sec. 224 provides research and demonstration grants to institutions of higher education and other public or private nonprofit agencies, institutions and organizations to improve libraries and library training, including development of new methods and equipment for processing, storing and distributing information.

The Commissioner is authorized to appoint a Special Advisory Committee of not more than nine members, to advise him on matters of general policy concerning research and demonstration projects.

Part C - Strengthening College and Research Library Resources

Authorization: \$5 million for fiscal year 1966; \$6,315,000 for FY 1967; \$7,770,000 for FY 1968; and such sums as Congress may authorize for fiscal years 1969 & 1970.

Authorization FY 1968	\$7.7 million
Budget recommendation, FY 1968	<u>4 million</u>
Decrease from authorization	\$3.7 million

Authorization FY 1967	\$6.315 million
Appropriation FY 1967	\$3 million

This section authorizes the Commissioner to transfer funds to the Librarian of Congress for the purpose of acquiring all library materials which are of value to scholarship and of providing and distributing catalog and bibliographic information promptly.

Some Justifications for Higher Education Act of 1965, Title II Programs

1. Modern college instruction places great emphasis upon the students getting their information and answers not from a textbook but from a wide array of library materials. Honors programs and independent study are significant factors. Faculty needs likewise are much greater than before. These conditions all make it imperative that every institution of higher education have an adequately stocked and sufficiently financed library.

2. Surveys have shown that 50 percent of our 4-year colleges and 82 percent of our 2-year institutions fall below the nationally accepted minimum standards for the number of volumes in their libraries. These standards were formulated after careful study and research by a representative committee of college librarians, and checked with more than 30 outstanding college presidents in all parts of the country, and the executive secretaries of the regional accrediting associations.

3. The increases in student enrollments have direct bearing on the cost of college library operation:

	<u>No. of Students</u>
1959-60	3,402,000
1962-63	4,345,000
Fall 1965	5,526,325
Projected Fall 1969	6,055,000
Projected 1975	8,995,000

Total instructional staff
(Full and part-time for resident
and degree credit)

1963-64	345,000
1965-66	398,000
Projected 1970-71	501,000

4. Although 5 percent of the total educational and general budget of the institution has been determined to be the minimum amount for the library to perform its proper services, the actual amount in recent years is only around 3.5 percent.

5. The shortage of trained librarians is crucial. It is estimated that 125,000 more librarians would be needed to meet current minimum staffing standards of school, college, university and public libraries. The existing library schools graduate each year only about 3,000 new professionals.

6. Libraries have been affected since World War II by the great explosion of knowledge which has resulted in a veritable flood of printed materials. These the college library must acquire and make available to students and faculty. For example, in the field of natural sciences alone - and there are many other fields - some 50,000 journals are now being published annually in addition to scientific books and reports. In 1953, 13,462 new titles were published; this rose to 28,595 in 1965, an increase of 112 percent.

7. The development of new fields of science, the increasing concern of the people of the United States with other parts of the world, and the necessarily broadening curriculum of our colleges and universities demand more books. At Princeton University, for instance, it was necessary to spend in 1964, \$198,500 for acquisition in new fields where only \$7,350 was spent ten years ago.

Libraries feel the effects especially of pure and applied research which constantly expands, divides, and forever diversifies. The facts are found not in a few languages, but in many, some of them rare. Graduate study has grown tremendously. The number of Ph.D. degrees has grown from 5,070 in 1960-61 to 8,316 in 1964-65, and is projected to rise to 17,080 in 1972-73.

9. Research programs undertaken by universities in connection with national defense and space exploration require a high quality of library resources and service.

10. Extension courses in universities and colleges must be backed up by library resources. These fill a need of adults who are continuing their education for new jobs or new ideas.

11. Library science needs continued research in librarianship in such areas as automation which will speed up the retrieval of information from storage to the user; or improvements in the operation of networks of libraries in order to cut costs and improve efficiency; or to know more about why people read, what they read, and how to make our libraries even more effective instruments in our community life.

12. It is estimated that the Library of Congress is unable at present to acquire and catalog promptly some 100,000 titles per year essential for research and scholarly study, many in foreign languages. If a substantial portion of these publications were acquired by the Library of Congress and promptly cataloged, it could help fill the special needs of the Congress and other branches of the Federal government, and help the requirements of science, industry, and scholarly activity for these specialized materials.

APPROPRIATIONS FOR LIBRARY RELATED PROGRAMS

<u>Program</u>	<u>FY'68 Budget Recommendation</u>	<u>F.Y. '68 Authorization</u>	<u>F.Y. '67 Appropriation</u>
<u>Elementary and Secondary Education Act</u>			
Title II - School Library Resources, Textbooks, and Other Instructional Materials	\$105,000,000	\$150,000,000	\$105 million (\$102 million allotted)
<u>Library Services and Construction Act</u>			
Title I - Public Library Services	68,000,000	114,000,000	\$76 million
II - Public Library Construction	35,000,000	45,000,000	35 million
(III - Interlibrary Cooperation	27,185,000	50,000,000	40 million
New(IV-A State Institutional Library	2,375,000	7,500,000	\$375,000
(Services	2,120,000	7,500,000	375,000
(IV-B Library Services to the Physically Handicapped	1,320,000	4,000,000	250,000
<u>National Defense Education Act</u>			
Title III - Instructional Assistance	50,000,000	110,000,000	\$79,200,000
Title XI - Institutes (includes education media institutes)	42,750,000	50,000,000	30,000,000
<u>Higher Education Act</u>			
Title II - College Library Assistance and Library Training and Research	41,300,000	72,770,000	35,300,000
Part A - College Library Resources	25,000,000	50,000,000	\$25 million
Part B - Library Training including institutes	8,250,000	15,000,000	7,300,000
Research	3,550,000	7,770,000	3,000,000
Part C - LC Acquisition and Cataloging	4,000,000		
<u>Higher Education Facilities Act</u>			
Construction of Academic Facilities, including Libraries:			
Title I - Undergraduate	390,000,000	728,000,000	\$453 million
II - Graduate	50,000,000	120,000,000	60 million
III - Loans	participation sales	400,000,000	200 million
<u>Medical Library Assistance Act</u>			
Construction	19,500,000	21,000,000	\$13.8 million
Training	12,500,000	10,000,000	7,500,000
Special Scientific Projects	1,300,000	1,000,000	1,000,000
Research and Development	no item listed	500,000	120,000
Resources	1,400,000	3,000,000	1,500,000
Regional Medical Libraries	no item listed	3,000,000	2,700,000
Publications	1,500,000	2,500,000	200,000
(and library support)	2,800,000	1,000,000	780,000
<u>International Education Act</u>			
Title I - Grant Program for Advanced and Undergraduate International Studies	36,525,000	40,000,000	- 0 -
Title II - Amendments to Existing Legis- lation (Includes Amendment to NDEA, Title XI, establishing Institutes in International Affairs for secondary school teachers.)			

Appropriations for Library Related Programs, Contd.

Page 2

	<u>F.Y. '68 Budget Recommendation</u>	<u>F.Y. '68 Authorization</u>	<u>F.Y. '67 Appropriation</u>
<u>Arts and Humanities Educational</u>			
<u>Activities</u>	<u>\$1 million</u>	<u>\$1 million</u>	<u>\$1 million</u>
Sec. 12 Instructional Assistance	\$500,000	\$500,000	\$500,000
Sec. 13 Institutes	500,000	500,000	500,000
 <u>Appalachian Regional Development Act</u>			
Supplementary grants for construction	\$29,844,000	needs new authorization	\$30 million
 <u>Public Works and Economic Development Act</u>			
Titles I & IV - Supplementary facilities grants	\$14,700,000	\$500,000,000	\$170 million
 <u>Demonstration Cities and Metropolitan Development Act</u>			
Supplementary grants for planning and development (including libraries)			
Title I --City Demonstration programs	\$412,000,000	\$412,000,000	\$11,000,000
Title II--Metropolitan programs	30,000,000	50,000,000	-0-
 <u>State Technical Services Act</u>	\$11,000,000	\$30,000,000	\$5.5 million

* * *

ALA Washington Office
February 7, 1967

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Edwin Castagna
Chairman
ALA Legislation Committee
May 22, 1967
Appendix I

Future of Federal Legislation for Libraries

According to our judgment, our primary responsibility in the immediate future is to seek appropriations up to the full authorizations for the legislation already enacted. (See attachment.) The next stage of legislation must be to coordinate the various Federal legislative programs and to effect cooperation wherever possible among all types of libraries. A theme that currently runs through Congressional debate and administrative proposals that has important connotations for library service of all kinds, is cooperation and coordination. Congress and the President are interested in the meshing of various Federal programs to eliminate overlapping and omissions and to achieve the most economical and efficient use of Federal dollars.

This means that we should look at library programs as a whole, furthermore we should study ways of coordinating library programs with other types of Federal projects.

In acting on further proposed measures, several precautions should be kept in mind. One is to keep localities and local institutions closely involved, be they community, school or college. All segments of the public must be brought into the picture as well. The second fact is that libraries -- public, school or college -- are at various stages of development in the various communities, regions, or States, and that situation must be taken into account.

Still another is that mere bigness in size of collection is not a solution to library problems. It may not always be necessary to make large additions to the resources of a State library, a municipal public library, a college or a university library to

obtain effective service for all the people. Adequate basic collections, however, must be established and maintained to fulfill the basic responsibilities of each institution. Quality of collections should be encouraged.

Attention must be paid to automation in the retrieval of information, but always with the understanding that there will be needs for traditional library services when the whole community is considered. These requirements cannot be met by computers and electronic means. These latter devices serve an important segment of the population, such as the scientist, the researcher, the scholar, and the business executive, whose informational needs must be covered thoroughly and immediately. At present, these sophisticated devices are expensive and too complicated for general, everyday routine use in broad library service. Investment in experimentation and pilot installations is essential.

The question of direction of the legislation is clear. It is desirable that proposals for lawmaking be focused, not on the problems of the libraries themselves, but rather on the users of libraries. For instance, it has been pointed out by discerning thinkers on the situation that a family or the various components of it, may require the services of the public library, the school library, the community college library, 4-year college library, the university library, the research library, and the specialized library. In other words, rather than taking each type separately, the total picture of library services and facilities should be looked at, with the ultimate solution perhaps regional systems or networks of libraries, with financial support and administration adjusted accordingly.

The Committee on Legislation at its Midwinter 1967 meeting in New Orleans agreed that legislation should be sought in order to effect the following:

1. The establishment of a permanent Commission on Library and Information Sciences with the responsibility of advising the Federal Government on national requirements for library resources and services.

2. The establishment of the Library of Congress as a national library with authority and responsibility to perform those services and functions as are deemed appropriate to such a library in the national interest.

In addition the Committee urges:

1. A structural organization in the U. S. Office of Education to insure that library activities, instead of being fragmented, be coordinated and consolidated in one high level unit, the administrative head of which would report directly to the Commissioner of Education.

2. That full implementation of the Depository Library Act of 1962 be achieved either by changes in administration or by amendment to the law.

Other recommendations merit careful consideration :

1. Provision should be made in the Federal legislation for strengthening of the State library agencies whose leadership role is crucial to library development both within the States and for the Nation as a whole. Federal funds should not be granted for purposes which are primarily a responsibility of the State, such as legislative reference, law, and archives. Care should be taken to see that Federal grants are not used in place of State money.

The State library agency should be involved, in varying degrees, in all programs of library development, and should have clear responsibility for coordination.

2. Increased financial assistance should be made available to help solve library problems in the metropolitan areas which are faced with declining populations and declining sources of taxation. This has come about at the very time they are confronted by greater and more complex demands than at any time in their history. The seriousness of the situation is brought home by the fact that 80 percent of the population in some States now live in metropolitan areas and that 75 percent of the country as a whole live in such areas. Legislation specifically tailored to meet the need should be sought.

3. Increased grants to remedy the crucial shortages of library personnel at every level should be made available.

Libraries have become a potent factor on Capitol Hill. The principle of Federal aid for libraries has been firmly established. In retrospect, library legislation appears no longer something too readily overlooked or quickly brushed aside. A bill to further library development -- be it school, college, or public library -- is no longer likely to be ignored or easily sidetracked by Committees. Key and influential Members of the Congress are willing to fight for these agencies as an essential aid in the progress of our democracy. We feel sure that the recommendations of the National Advisory Commission on Libraries will receive the careful attention of the President and the Congress and that, as a result of action on these recommendations, the Nation's libraries will be able to improve their important services to all citizens.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY

Paul M. Howard
Executive Secretary
Federal Library Committee
May 22, 1967
Appendix J

Library Programs of the Federal Government

Background

In 1953, Verner Clapp and Scott Adams, in an article on Federal libraries, stated that "Regardless of political shifts, there are certain demonstrable trends, rooted safely in history, which appear to be more important than others and to deserve remark."¹ These trends, they identified as Recognition of the essential role of libraries in government, Tendency to form national system, Experimentation and A national outlook.

In the intervening fourteen years several events have occurred which emphasize the trend toward recognition of the essential nature of libraries in Government programs. The Brookings Institution has published its survey, "Federal Departmental Libraries,"² an interagency Federal Library Committee has been established, the Committee of Scientific and Technical Information has expressed concern with Federal library service, and the National Advisory Commission has been authorized to "appraise the policies, programs, and practices of public agencies... which have a bearing on the role and effective utilization of libraries. In spite of many difficulties, librarians have, over the years, been able to establish an informal network of library service. The LC card distribution service is an example. Interlibrary lending of materials has a long history. In 1965 the Library of Congress loaned 90,000 volumes to other libraries in the District of Columbia and lending between the other Federal libraries in the District was at approximately the same volume. Facsimile copies are provided at an increasing rate. There is a government-wide regularly scheduled inter-agency messenger service. The Library of Congress regularly receives surplus and little used materials from other

Federal libraries and thus becomes a central repository for the entire Federal library network. The rudiments of a real network have been established. With modern communication techniques this network can, of course, be strengthened into a more dynamic national information system.

These over-all actions, linked with increased establishment and support of libraries within Federal agencies, indicate that the "... Government has indeed made considerable progress toward recognizing that libraries are essential to its operations and that library services may be exploited for its own programs, as well as for the benefit of the general national good."¹

The Scope of Federal Libraries

The Government's vast library program includes between 2,000 and 2,500 Federal libraries, comprised of the three National libraries (Library of Congress, National Library of Medicine, and National Agricultural Library), Presidential libraries, research and special libraries, academic and school libraries, and public libraries in the armed services. Excluding the three National libraries, these organizations employ more than 2,300 professional librarians and require more than 270 new librarians annually. The special libraries among them of which there are more than 600, often collect with great depth in a narrow aspect of a subject and thus have research materials not available elsewhere. Many of them support research on the frontiers of knowledge of great import to the nation and the world. A summary report from a statistical survey of such libraries is attached.

Status of Knowledge about Federal Libraries

There have been few overall surveys of the Federal library situation. At one time the Library of Congress, at the request of a House Appropriation Committee, made a study of Federal library expenditures.³ An issue of Library Trends¹ was devoted to Federal libraries. The Brookings Institution sponsored a survey of Federal Departmental Libraries.² COSATI has included libraries in its estimates of expenditures on scientific and technical information. All of these studies have been admittedly fragmentary and incomplete.

The Department of Defense, in its recent Study of Mechanization in DOD Libraries and Information Centers,⁴ has made an initial effort to study automation problems in depth. The ALA-SLA "The Use of Data Processing Equipment by Libraries and Information Centers" includes a total of 143 Federal libraries in its report.⁵

There have been numerous surveys of individual Federal libraries and reports and articles appear in the Library press from time to time, but there is no over-all systematic program for gathering and interpreting information about Federal libraries. Hence, there is no way in which management or research workers can secure the basic information for analysis of problems, for program planning or for projecting Federal library plans.

The Federal Library Committee

Establishment and Functions

Establishment by the Library of Congress in cooperation with the Bureau of the Budget, the Federal Library Committee was organized in 1965 and assigned the following functions as listed in the attached copy from the Federal Register dated July 3, 1965:

"The Committee shall on a Government-wide basis (1) consider policies and problems relating to Federal libraries, (2) evaluate existing Federal library programs and resources, (3) determine priorities among library issues requiring attention, (4) examine the organization and policies for acquiring, preserving, and making information available, (5) study the need for and potential of technological innovation in library practices, (6) study library budgeting and staffing problems, including the recruiting, education, training, and remuneration of librarians.

"Within these areas the Committee shall recommend policies and other measures (1) to achieve better utilization of Federal library resources and facilities, (2) to provide more effective planning, development, and operation of Federal libraries, (3) to promote optimum exchange of experience, skill, and

resources among Federal libraries, and as a consequence (4) to promote more effective service to the nation at large."

FLC Achievements

In the brief period since its establishment, the Committee has developed a program that involves both policy and operational aspects of Federal Library work. It provides a consulting and clearinghouse service on Federal library problems. It serves as a liaison with other groups concerned in library and information programs. Its monthly meetings are concerned with the improvement and development of library service to the Federal Government. It has established a channel of communication with 1500 libraries through its Newsletter. It has, in cooperation with the Office of Education, conducted a survey of special libraries in the Federal Government. It has virtually completed compilation of the laws and regulations which affect operations of Federal librarians.

The Committee has also established a number of task forces which have:

1. Developed a statement defining the mission of libraries in the Federal Government with guidelines for its implementation, which has been approved by the FLC and transmitted to the Bureau of the Budget where it was discussed at the Executive Officers Conference and met with general approval. This document is basic to all the work of the Federal Library Committee and to the development of minimal standards for adequate Federal Library Service. The task force plans to review the total FLC program for the purpose of correlating its various activities into an integrated, well-rounded program of standards of development.

2. Engaged in a series of studies designed to develop a methodology for the review and description in comparable terms of Federal library holdings in order to recommend a correlated program for acquiring and retaining informational materials adequate for the Government's needs and its national responsibilities. The development of a methodology is extremely difficult and complex for libraries as specialized as those in Government. However,

within the next year, the task force expects to solve the problem of methodology and to propose a study upon which Government-wide allocation of responsibilities can be based.

3. Taken a census of automated activities in Federal libraries, has encouraged the Library of Congress to establish a library automation referral center and is presently engaged in drafting a reconnaissance study for a proposed project to identify desirable goals for Federal library automation programs over the next five fiscal years. Published a list of current literature of Federal Library Automation in the FLC Newsletter.

4. Supplied library schools with information about Federal library job opportunities. Distributed several thousand small attractive recruiting brochures. Established a network of library recruiters centered around Civil Service regions. Published a monthly roster of vacancies. Prepared two travelling exhibits extolling the virtues of Federal library work.

5. Organized and published the FLC Newsletter which includes information about Government activities of interest to Federal libraries, such as personnel and recruiting news, summaries of FLC meetings, projects, etc.

6. Compiled a basic bibliography on library buildings furniture, equipment, and space which will be kept current in the FLC Newsletter.

7. Developed a code of practice for interlibrary lending (copy attached). Undertaken the development of a standard inter-library loan form which will be suitable both for manual and machine use.

8. Nearly completed a Handbook of Procurement Practices for Federal Libraries. Planned a workshop to evaluate this Handbook and a companion workshop on goals in Federal library automation (May 25-26).

Thus, the Federal Library Committee has established a firm base of achievement on which to build its future program. However, in order to fulfill its obligation to the Government, and to the nation, a higher level of support must be established.

Problems and Goals

Federal libraries are service organizations whose missions are to support the programs and goals of other organizations. These organizations may be laboratories, or bureaus, or departments. Most of the administrative problems of Federal libraries stem from this fact. Because of this, it is difficult to establish true agency-wide library systems, and libraries seldom grow large enough to draw top administrative attention. Because of this, libraries are usually separated from the policy-making echelons of Government, and are often overlooked in management decisions.

Most library services in Government are either decentralized or established as part of an administrative services group. In some cases they are administratively decentralized with a staff officer working with special types of libraries as in the Army and Navy (in the Air Force and Veterans Administration, the staff works with all libraries in the agency).

It has been difficult for Federal libraries to act in concert on common problems. There have been varying interpretations of laws and regulations even within a single department or bureau. Libraries have been placed in the organizational structure of many agencies away from the components which they serve with no provision for communication about plans and programs. In the past, this combination of circumstances has led to many administrative problems and has been responsible for many of the deficiencies of Federal library service.

In an effort to further overcome the problems, the FLC sees a need for the following:

1. A substantial body of firm knowledge about Federal libraries must be developed so that Federal library systems and networks may evolve in an orderly fashion from the existing structure.

2. Administrative understanding, concern, and support for the Federal library's role in meeting the research, educational, managerial and cultural responsibilities of the Government must be increased in order that the libraries may be permitted to give their full share of support to agency research and management programs.

3. The national and international aspects of Federal library service need to be recognized and supported so that all Federal libraries may participate fully in the cooperative library development programs now sponsored by the Government.

The Need for Research Projects

The Federal Library Committee is developing plans for a series of research projects designed to accomplish these objectives and meet these needs. These programs will extend and sharpen the knowledge about Federal library programs, including the nature and depth of the Government's great research collections, the application of newer technologies in automating library procedures and improving the operation of the Federal library network, developing guidelines and standards for programs and operations.

The Federal Library Committee is faced with the necessity of contracting for most of these projects since they will necessarily be too extensive and comprehensive to be carried on successfully by volunteer task force members who have other full-time responsibilities. The Committee's work will need to be financed in two ways: There needs to be a regular appropriation to support the on-going activities under the Secretariat, and there needs to be project financing to support developmental activities similar to those which the Government is supporting for non-Federal libraries.

In summary: For the first time there exists an instrument in the Federal Government by which it can evaluate its library policies and programs, can establish guidelines for library improvement, standards for measurement of their achievements and learn the nature and degree of managerial support needed to develop libraries to their full capacity for serving the informational needs of its employees and other qualified users throughout the nation. The opportunity now exists to develop and coordinate Federal library resources as part of a great national information system.

1. Clapp, Verner W. and Adams, Scott. issue editors
Current Trends in Libraries of the United States
Government , Library Trends volume 2, no. 1,
July 1953, p. 15-16.
2. Evans, Luther. Federal Departmental Libraries...150 p.
Washington, D. C. The Brookings Institution, 1963.
3. U. S. 82nd Congress. House. Subcommittee on appropriations.
Legislative Branch Appropriations for 1953. Hearings.
Washington, D. C. G.P.O. 1952, p. 62-71.
4. Booz- Allen Applied Research, Inc. Study of Mechanization in
DOD. Libraries and Information Centers. Technical
Report AD 640-100. Cameron Station, Virginia. Defense
Documentation Center, September, 1966.
5. Creative Research Services, Inc. The use of Data Processing
Equipment by Libraries and Information Centers. Chicago,
ALA Library Technology Program, 1967.

Attachment 1

PREFACE

The Federal Library Committee is an inter-agency committee established under the auspices of the Bureau of the Budget and the Library of Congress.¹ Its membership consists of representatives of the cabinet departments and six independent agencies, the latter selected for two year terms on a rotating basis. The Committee was organized to:

- (1) consider policies and problems relating to Federal libraries; (2) evaluate existing Federal library programs and resources;
- (3) determine the priorities among library issues requiring attention; (4) examine the organization and policies for acquiring, preserving, and making information available;
- (5) study the need for and potential of technological innovation in library practices;
- (6) study library budgeting and staffing problems including the recruiting, education, training, and remuneration of librarians.

In considering its responsibilities the Committee has concluded that immediate priority must be given to establishing a common understanding of the role of Federal libraries among the Government's information services so as to insure full utilization of library resources. Therefore, the Committee has formulated this statement of mission and guidelines for its implementation.

The Committee plans subsequent statements on specific library operations and services with a view to raising the general level of Federal library performance.

¹ The Federal Register, 30:8557 (July 3, 1965).

INTRODUCTION

All Federal agencies require information to operate effectively. Managerial decisions and professional expertise necessary to successful accomplishment of agency missions depend on an informed staff. The increased complexity of Government, the accelerated growth of knowledge, and the explosion of documentation have focused attention on the need to increase effectiveness of all mechanisms providing information services to Federal agencies among which Federal libraries are of special importance.

The most urgent library problem confronting Federal agencies is identical with that confronting non-Federal institutions, i.e., the problem of providing library service adequate to meet urgent growing demands. The gravity of this problem was recognized by the President when on September 2, 1966 he issued Executive Order No. 11301, creating a National Advisory Commission on Libraries to "evaluate policies, programs, and practices," affecting the nation's libraries.

The key elements of the problem include:

1. A staggering increase in production of information accompanied by an overwhelming demand for access to all types of information;
2. The growing complexity of our civilization, the increasing educational level of our population, and its changing cultural characteristics which have created and will continue to create new and heavier demands upon Government and upon educational and research institutions such as libraries;
3. Cumulative deficiencies in library resources, staff, and services which are not equal to present and anticipated demands;

4. The development of new data processing techniques which are revolutionizing information handling and are placing new pressures on libraries.

Essential to the solution of this urgent problem is a clear understanding within Federal agencies of (1) the services Federal libraries can provide to support missions of their agencies, and (2) the resources the libraries must have to develop those services. The statement of library mission that follows and the appended guidelines are a basis for attacking the problem.

THE FEDERAL LIBRARY MISSION

1. DEFINITION AND SCOPE

Federal libraries support the missions and programs of their agencies principally by providing bibliographically related information services. To achieve this objective they have at least four basic responsibilities.

- a. To collect and organize pertinent recorded information, in whatever form required, to meet managerial, research, educational, informational, and other program responsibilities;
- b. To provide ready access to their materials and to assist users in locating required information;
- c. To disseminate pertinent information from their collections on a selective basis;
- d. To make their collections and services known to present and potential users.

2. LIBRARY FUNCTIONS

To discharge these basic responsibilities, Federal libraries perform a range of tasks including assistance to users through literature searching, reference service, bibliographic work, professional guidance to readers, lending and borrowing materials, and by supporting these services through selecting, acquiring, cataloging, indexing, and abstracting pertinent materials. The effective performance of these functions requires continuing appraisal of the information needs of the agency.

3. RELATION TO FEDERAL COMMUNITY

The collections of Federal libraries constitute an important resource for providing information needed in daily operation of the Government, and in the conduct of agency research programs. Inter-library lending, inter-agency reference assistance, cooperative cataloging, literature searching, and other forms of cooperation are essential to full and efficient use of this resource.

4. RELATION TO RESEARCH COMMUNITY AND THE GENERAL PUBLIC

Increasingly, a community of interest has developed among Federal and non-Federal library users. Federal libraries support those missions of their agencies that relate to non-Governmental groups by extending their library services to other libraries, research institutions, and the general public.

GUIDELINES

For Adequate Federal Library Service

Government agencies* require library services fully responsive to their research and other information needs. This can only be achieved through increased administrative attention, guidance, and support. Agency management should see that its library managerial policies are consistent with the foregoing statement of the Federal Library Mission. The Guidelines which follow provide Government agencies a means for strengthening their library management, resources, and services. Implementation of these guidelines demands intensive program planning and development.

The Guidelines are arranged in three closely related categories: Organization and Management; Library Resources; and Library Services.

A. ORGANIZATION AND MANAGEMENT

Sound organizational and management practices are necessary to insure that agency libraries provide adequate service, responsive to agency needs. Basic to the effectiveness of these practices, however, are full communication and understanding of program goals, a competent library staff, and adequate administrative support for library improvement.

The following practices are recommended:

1. Each agency should formulate a written policy stating its library's mission and its place in the organizational structure. This should be reviewed at regular intervals or at least not less than every five years.
 - a. Each Federal library should maintain current operation manuals that explain the agency's mission to the library staff and that establish procedures to serve that mission.
 - b. To insure responsiveness to user needs, each agency should locate its library or libraries organizationally where they can maintain most effective communication with agency program and planning officials.
2. Each agency should see that its library program is professionally administered and that the library staff is sufficient in number and adequately trained to fulfill library responsibilities.

* The word agency is used to cover not only separately organized units of the Federal Government, but also where appropriate, subordinate units thereof. The word library is used to cover not only a department library, but a library system, or libraries serving subordinate units.

3. Agencies should budget for library needs in the same manner as for the needs of other professional services which support agency missions. In doing so, the following factors should be considered:
 - a. The full range of services the library must provide in support of the agency mission;
 - b. Increased effectiveness of agency management and professional activity to be achieved by using the specialized services provided by the library;
 - c. The extent and nature of specialized agency research activities requiring library services;
 - d. The range of subject areas the library must cover to fulfill its mission;
 - e. The availability of other pertinent information resources and the expenditures required to exploit them in support of the agency mission.
4. The agency should require pertinent reports from its libraries including up-to-date statistical records of library operations, services, and resources upon which sound management and policy decisions can be made. The libraries should make such reports compatible with other library reporting practices currently being developed by the Office of Education.

B. LIBRARY RESOURCES

Basic physical resources of a library consist of recorded information such as, but not limited to: books, documents, periodicals, serials, technical reports, dissertations, pamphlets, manuscripts, films, micro texts, slides, audio discs or tapes, computer tapes, maps and photos, and the necessary related equipment.

The following guidelines are designed to assure that Government libraries have adequate resources organized for optimum accessibility.

1. The agency should require its library to provide, in sufficient quantity, those resources necessary to carry out the agency's mission. In addition to reference materials, these resources should include the indexes and bibliographic tools required to identify pertinent literature available in other libraries.
2. The agency should require from its libraries a carefully developed, written acquisition policy based upon the agency's mission and related library responsibility. The policy should include scope, coverage, and retention guidelines.
3. Each library should develop a policy statement governing the organization of its resources by means of cataloging, indexing, abstracting, and other bibliographic procedures which may include use of machine techniques. The statement should define the scope, coverage, and form of the catalog and its relation to other pertinent bibliographic tools. The agency should require its library to cooperate in, and make the fullest practical use of, centralized cataloging and indexing services.

C. LIBRARY SERVICES

Library services comprise those which involve knowledge of, and interpretation and exploitation of, the collections and their bibliographic apparatus and those which involve lending materials, directional assistance, and record keeping. Where the services enumerated below are not provided, the agency, with assistance from its library, should re-examine the library program in relation to current information needs, and develop a modern program of library services including:

1. Providing factual information responsive to specific inquiries, including when appropriate, the selection and synthesis of information from various sources and directing the inquirers' attention to related information beyond the immediate scope of the query;
2. Providing an organized program for selective dissemination of information based on systematic analysis of agency and staff information needs through interest profiles and program analysis;
3. Compiling comprehensive or selective bibliographies selected for specific purposes and produced either on the initiative of the library or upon request. Such bibliographies may be current or retrospective and should, when appropriate, include annotations or abstracts;
4. Performing literature searches for the purpose of documenting and producing state-of-the-art reviews;
5. Providing professional guidance to readers in the use of library collections and bibliographic resources, and acquainting them with other information sources such as individual subject specialists, information centers, and research organizations;

6. Lending library materials or photo-copying when appropriate;
7. Borrowing, for official use, materials from other Federal or private libraries;
8. Systematically providing information about agency library resources, services, and programs to encourage maximum use of these facilities.

In addition to these services, each agency should define the extent of library service it is willing to provide to other agencies as part of a cooperative network of Federal library resources.

Federal Library Committee Task Force Objectives

1. Acquisition of Library Materials and Correlation of Federal Library Resources

The purpose of this task force is to review and report upon acquisition and retention policies of Federal libraries, to evaluate holdings which may be appropriate for inclusion in a correlated program, to investigate and report upon problems related to the correlation of Federal library collections with other information activities, and to recommend programs and methods of correlating research collections of Federal libraries with other resources both within and without the Federal establishment.

2. Automation of Library Operations

The purpose of this task force is to review and report upon the status of automation in Federal libraries, to encourage development of compatible automation systems where feasible, to furnish guidance to Federal administrators and librarians on automation problems in libraries, and to provide liaison between Federal libraries and other groups interested in the application of automatic data processing to information and document retrieval.

3. Interlibrary Loan Arrangements for Federal Libraries

The purpose of this task force is to establish a code of practice for interlibrary loans between Federal libraries with a view toward improving services and furthering the effective use of Federal library collections.

4. Mission of Federal Libraries and Standards for Federal Library Service

The purpose of this task force is to review and analyze existing statements of mission and functions, to develop at appropriate levels general statements of Federal library functions and patterns for individual statements of mission, to establish the basic elements upon which standards of Federal library service should be built, to draft guidelines, for administrators, related to the establishment and evaluation of library service, and to serve as liaison between Federal libraries and other groups interested in evaluating library service.

5. Physical Facilities of Federal Libraries

The purpose of this task force is to investigate the problems related to provision of adequate physical facilities for Federal library service including location, space, building, remodeling, lighting, equipment, etc., and to establish guidelines to assist librarians and administrators in their solution.

6. Procurement Procedures in Federal Libraries

The purpose of this task force is to review and compile the laws and regulations related to procurement and disposal of library materials for Federal libraries; to review existing procurement practices; to recommend revisions in law, regulations, or practice which will facilitate the procurement of library materials and contribute to the economy and efficiency of Federal libraries.

7. Recruiting of Personnel in Federal Libraries

The purpose of this task force is to plan and develop a continuing program for increasing the supply of highly qualified librarians entering the Federal service at all levels, based on an evaluation of immediate and long-range needs; to promote the coordination of existing programs where feasible; to facilitate the internal movement of library personnel within the Federal service.

8. Sub-Committee on National Library Week

The occasion for establishing this group was a request to cooperate with the D.C. Committee on National Library Week. However, early in its deliberations, the group decided that its function should be broadened to include all activities concerned with inducing the clientele to use Federal library services and to create goodwill toward Federal libraries.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY

Melvin S. Day

Deputy Assistant Administrator of the Office of Technical Information
National Aeronautics and Space Administration

May 22, 1967

Appendix K

The NASA Scientific and Technical Information System

Function

The Office of Technology Utilization in the National Aeronautics and Space Administration is responsible for processing and communicating scientific and technical information on aerospace. The NASA information system disseminates the results of NASA's research and development effort, and services the information needs of NASA installations, NASA contractors, the aerospace community, the national economy through the NASA Technology Utilization Program, and the public through the Superintendent of Documents and the Clearinghouse for Federal Scientific and Technical Information.

Operating Principles

The design of the information system is based on consideration of factors which contribute to the effectiveness of information-handling services. These factors, expressed as objectives are: (1) to take every reasonable advantage of the benefits that accrue from compatibility with other information systems, so as to provide for efficient exchange of information; (2) to provide for the adaptation of products and services to the increasing and ever diversifying demands of the users; (3) to improve products and services in an evolutionary, rather than revolutionary, fashion, so that innovations can be made with minimum reprocessing of materials already in the system; and (4) to allocate functions and services to centralized or decentralized operations, depending on the economics of processing and where the information is to be used.

Operation

Aerospace information is acquired from NASA Centers, NASA contractors, other Government agencies and their contractors, professional societies, industrial firms, private and university research institutions, and from foreign government, industrial, and academic laboratories. The NASA scientific and technical information collection of over half a million items is currently increasing at the rate of over seventy-five thousand items a year.

Processing data on the items in the collection are stored on magnetic tape. The tape is used not only in preparing announcement journals and their indexes, but also for literature searches, continuing bibliographies, and various media for the selective dissemination of information. The computer configuration now in use is based on an IBM 360/40 system.

Aerospace information is disseminated by technical publications, announcement media, document services, literature searches, and bibliographies.

In addition to the central facility and the libraries or information centers throughout the NASA complex, there are data centers and Regional Dissemination Centers. The data centers acquire and disseminate technical data on tracking, results of space probes, and similar research and development specifically related to the aerospace program. Regional Dissemination Centers, located throughout the nation, provide information on technological developments and innovations to nonaerospace industries.

Products and Services

Technical Publications: Information resulting from or needed in NASA's research and development activity is disseminated in the following series of technical publications: Technical Reports, containing scientific and technical information of major, complete, and lasting value to the scientific and technical community; Technical Notes, reporting the results of specific projects or tasks; Contractor Reports, containing information generated by NASA contractors and grantees,

and released under NASA auspices; and Technical Translations, produced from information previously published in a foreign language but requiring distribution in English.

The Special Publication series for disseminating information derived from or of value to NASA activities includes monographs, state-of-the-art summaries, conference proceedings, data compilations, handbooks, sourcebooks, histories, charts, and bibliographies, as well as publications describing technological developments which appear to be applicable to nonaerospace uses. Technology utilization publications also include Tech Briefs -- brief, concise descriptions of innovations useful in the industrial community.

Announcement Media: The aerospace information acquired by the NASA information system is announced in abstracting and indexing journals. Scientific and Technical Aerospace Reports (STAR) is the announcement medium for the worldwide report literature on the science and technology of space and aeronautics. Published semi-monthly, each issue of STAR contains abstracts of more than a thousand items arranged in thirty-four subject categories. Each issue is indexed by subject, corporate source, personal author, report number, and accession number. Cumulative indexes -- including a contract number index -- are published quarterly and annually. International Aerospace Abstracts (IAA) covers the worldwide published literature, in compatible fashion with STAR. The technique for preparing the indexes to these journals is now programmed to use the Graphic Arts Composing Equipment (GRACE) developed by the National Library of Medicine.

Special coverage to serve the interests of special user communities is provided by Reliability Abstracts and Technical Reviews, covering the report and published literature on the theory and practice of reliability as applied to aerospace, and Aerospace Medicine and Biology, covering the literature on the biomedical effects of simulated or actual flight in aerospace.

Document Services: NASA publications are distributed automatically as well as on secondary request. For organizations engaged in the aerospace program, the NASA information system serves as a source for the reports announced in STAR. Distribution may be in hard copy, microfiche, or facsimile ("blow-back").

Documents in the NASA collection are reproduced on microfiche, a 4- x 6-inch sheet of negative film carrying up to 60 pages in micro-reproduction. These microfiche may be used for scanning, to produce full-sized facsimile copies of pages or full reports, and for economical distribution of documents or document collections.

Literature Searches: The typical search product is a computer print-out of the items selected from all or part of the NASA information collection as required by the user's query. Each entry shows the bibliographic citation and the indexing terms assigned to the item -- the latter so that the user may evaluate for himself the relevance of each item to the substance of his inquiry. Searching can be in response to queries which specify topic or subject, corporate source, contract, personal author, a given range of accession numbers, any of the thirty-four subject categories, or report numbers.

When searches in particular topical areas are frequently requested, or research in given areas is being planned, or certain topics become significant to ongoing projects -- all indicating a current interest in a special topic -- the needs of the users are anticipated by publishing (in the Special Publication series) Continuing Bibliographies. Each continuing bibliography is updated by supplements as significant amounts of new material on the particular topic are added to the collection.

Because the success of a topical literature search is very much dependent upon the validity of the indexing terms used, a NASA Technical Thesaurus, compatible with the thesauri of other government information services, is being developed. This aerospace thesaurus will be used not only in indexing the items announced in the abstracting journals, but also in the current awareness and retrospective search services.

Selective Dissemination of Information: An outgrowth of the search tape program is the Selective Dissemination of Information (SDI). SDI is a current awareness service custom-tailored to the individual needs of the user: it combines the advantages of the announcement journals' current awareness on a continuing basis with the selectivity of the individual literature search. In the NASA/SDI program, each individual participant's interest profile is matched by computer with the terms assigned to the newly acquired items in the system. When a match is identified, the computer prints out a notification which is mailed to the user.

Feasibility studies are underway on what is designed to be a more economical version of SDI in which the matching is with standard profiles of selected topics. By inexpensive reproduction of the print-outs, many individual users with comparable interests can be served by each topical output.

Real-Time On-Line Dialog Searching: With the intent of providing direct linking of the user with the central computer store of information, tests are underway of systems involving remote consoles, long-distance communication lines, and time-shared computer-search capabilities. With such systems, the user himself, at his place of work, may query the central store and receive immediate feedback as his search progresses.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Walter C. Christensen
Staff Assistant for Scientific Information
Department of Defense
May 22, 1967
Appendix L

Technical Information Activities in the Department of Defense

The Department of Defense, which spends over \$7 billion annually for research and development, produces and uses a major portion of the technical information available in the United States. This technical information ranges from the results of basic scientific research through test data on military hardware, all of it characterized by its relevancy to national security. The principal group served by this information is the "Defense Community," which includes all the components of the Department of Defense and Defense contractors, including academic institutions. The information is used to expand the defense-related technological base, to meet specific mission requirements, and to make management decisions.

To handle this massive amount of technical information, the Department of Defense employs various decentralized information networks designed to meet the needs of individual R&D activities. Included within these networks are approximately 120 technical libraries with annual operating costs in excess of \$14 million.

Historically, these libraries have been the keystone of our formal information networks. However, today's requirements for information in ever increasing amounts and in shorter periods of time are no longer compatible with the traditional operation of the technical library. Recent Defense studies of users' needs indicate that Defense scientists and engineers desire 20% of their technical information in less than one day. We also find that over 40% of the

technical information used is technical data, which is found primarily in technical reports, not in scientific and technical books. Finally, we find that user engineers and scientists turn to libraries, or other formally organized information services, as a first source of information less than 10% of the time.

Increasing awareness of these factors has brought Defense technical libraries into a transitional period involving a search for better methods of acquiring material which is related to their users' needs, for improved methods to store and retrieve information, and finally but most difficult, for new means to provide the users with the information required to perform their missions. This latter function takes on increased complexity since the users do not normally want documents but want specific information related to a specific problem or subject. Further, they want this information in terms which are meaningful to them.

It is quite evident that Defense libraries will have many problems in adjusting themselves to the new requirements. I do not pretend to have the answers to these problems. Neither am I willing to exclude the technical library as an integral part of our future technical information systems. Rather, I foresee an evolutionary change whereby technical libraries become increasingly information oriented rather than document oriented. In addition, I foresee the emergence of new types of personnel staffing these facilities -- personnel not only trained in the various aspects of information handling but also possessing technical competence in areas of interest to the user community. Many of our technical libraries are already moving in this direction. However, we have only begun to match our technical information services with the new user needs, and the completion of this transitional phase will take a good number of years. Solutions to Defense library problems, and the evolution just described, can best be fostered, it is believed, through action taken by the Department of Defense itself. As evidence of a positive approach to the resolution of some of these problems, the Department, through its scientific and technical information program, is supporting research for the improvement of technical library operations and services. This research is carefully coordinated with the activities of other Federal Agencies in the library research area; including the National Science Foundation, the Library of Congress, and the Office of Education. I believe that the results of this research will be helpful also to technical and research libraries at large. Among

the studies completed to date are a guide to laws and regulations of Federal libraries, a study on classified information and technical libraries, and a program for design and pilot test of inter-library mutual support systems. We have under study the criteria for operational library standards, library services automation, the dissemination of advanced abstracts, and indexes for specialized collections.

In a few specific subject areas we have taken what may be called a revolutionary approach to the technical information problems by establishing information analysis centers. At present, we have twenty such centers with an annual operating cost of about \$5.6 million. In general, these centers are operated with engineers and scientists who devote part of their time to maintaining an awareness of the information pertaining to a narrow subject area and to maintaining an awareness of the information pertaining to a narrow subject area and to answering specific inquiries from qualified users. Although these centers are quite effective in transferring information, they are expensive and only warranted in a limited number of areas. We carefully control the establishment of these centers and closely monitor their operations.

And, finally, there is the Defense Documentation Center at Alexandria, Virginia. This Center provides centralized secondary distribution of technical reports produced by DoD research and development efforts. In fulfilling its role, DDC deals only with the documents and does not attempt to assess the value of information such documents contain. Basically, the DoD technical report system provides for primary distribution of information by the DoD component responsible for the work to individuals or offices with known interest in the area. Simultaneously, copies of the report are provided to DDC. There, the report is screened, assigned a control number, abstracted, and indexed with controlled descriptor terms. For unclassified, unlimited reports, this abstracting and indexing function is performed by the Clearinghouse for Federal Scientific and Technical Information (CFSTI) under contract to DDC. These reports are announced on a bi-monthly basis in the Technical Abstract Bulletin (TAB), which is disseminated throughout the Defense community. The unclassified, unlimited reports are also announced by the CFSTI and are for sale to the general public. Reports are provided to qualified DDC users free of charge. Qualified users consist of DoD components and DoD contractors and potential contractors as well as other government agencies and their contractors and potential contractors. Access to classified reports is governed through the establishment of "need-to-know" qualifications and facility and personnel security clearances.

During this fiscal year, we anticipate that DDC will acquire about 50,000 new reports and will fill approximately 1,500,000 requests for copies from the total DDC collection of 850,000 titles. Currently, we have 3,229 DoD components, 2,350 contractors, and 543 other government organizations registered for DDC services.

In addition to providing documents, DDC also prepares special and demand bibliographies. Through March, DDC had over 15,000 requests for bibliographies in FY 67 -- a considerable increase over last year's demand. In view of the increasing importance of this service, we have placed emphasis on providing bibliographies on a timely basis with a high degree of relevance.

In addition to these statistics on DDC operations, CFSTI estimates that sales of DoD reports will account for almost 30% of their total FY 67 sales.

Though DDC services are generally felt to satisfy the need for secondary distribution of documents and preparation of bibliographies, I feel that there are many improvements still to be made. Accordingly, a development capability is being established within DDC to explore how we can more effectively exploit the technical information contained in technical reports.

In summary, the DoD technical information activities are all undergoing changes with the overall goal of effectively providing users with the technical information they need, when they need it, and in the most usable form.

STATEMENT TO THE MEMBERS
OF THE
NATIONAL ADVISORY COMMISSION ON LIBRARIES
GIVEN BY
Commissioner Howe and Staff
U. S. Office of Education
May 23, 1967
Appendix M

DIVISION OF LIBRARY SERVICES AND EDUCATIONAL FACILITIES

I. 1867 - 1937 - Exploratory Phase

The goal of the U. S. Office of Education since its establishment in 1867 is to promote the cause of American education. It is presently administering a \$4 billion budget involving over 75 educational programs. It has a staff of nearly 2,800 as contrasted to the original staff of the Commissioner and three clerks. Its concern for libraries goes back to 1870 when the Office published its first library survey. In 1876, it published a monumental 1,200-page report titled Public Libraries in the United States: Their History, Condition, and Management, a landmark in librarianship in this country.

The interest in a separate library unit in the Office of Education began in the early years. The American Library Association expressed concern in annual conferences that proper attention be given to library interests in the Office. In 1919, hearings were held on H. R. 6870 and S. 2457 to provide for the establishment of a division of library service.

II. 1938 - 1956 - Developmental Phase

An appropriation was provided by the Congress in the late 1930's for the establishment of a Library Services Division in the Office of Education. This division (the name and its place in OE organization varied from time to time) began operation on

January 2, 1938, with a staff of four professional workers and three clerical staff members. There were few changes in the number of these employees until early in 1957.

It is interesting to note the wording of this original appropriation (1936 49 Stat. 1797). It states in part:

For making surveys, studies, investigations, and reports regarding public, school, college, university, and other libraries; fostering coordination of public and school library service; coordinating library service on the national level with other forms of adult education; developing library participation in Federal projects; education; developing library participation in Federal projects; fostering Nation-wide coordination of research material among the more scholarly development of public, school, and other library service throughout the country...

Carleton B. Joeckel in a report, Library Service, Staff Study No. 11 prepared for the Advisory Committee on Education and published by the Government Printing Office in 1938 noted: "The recent establishment of a Library Service Division in the Office of Education has provided a Federal library headquarters responsible for leadership in a national program of library development." He also stated that: "On the negative side, it should be recorded that the following items are lacking in the Federal library machinery: (a) A central coordinating agency for the Federal libraries, (b) a well-organized national center for interlibrary loans and bibliographic information, (c) a system of Federally aided regional library centers, and (d) Federal subsidies to libraries."

In this period before the passage of the Library Services Act in 1956, stress was placed on the collection and analysis of library statistics. Ralph M. Dunbar who directed the unit from 1938 to 1957 established a pattern of library statistics which resulted in separate nationwide surveys on school, academic, and public libraries. Twelve nationwide studies were conducted (four in each of the three areas of library service) in intervals of five, six, or seven years.

III. 1957 to Present - Broadening Responsibilities

A. The Library Services and Construction Act

In 1956 the Library Services Section consisted of a Chief and three professional specialists who were engaged primarily in conducting library status studies and in compiling library statistics. Early in 1957 the library function was elevated to Branch status as a result of the passage of the Library Services Act in 1956. This pioneer program authorized \$7.5 million per year for five years to provide grants to the States for the further extension of public library services to areas of less than 10,000 population which had no public library services or which had inadequate libraries. To aid in the administration of the program, three library extension specialists were added to the Branch staff.

In 1960, one year prior to the termination of the LSA program, Congress extended the Act for five years, through 1966. In 1964, the Act was amended to include urban as well as rural areas and a Title II was added which provided for grants to the States for the construction of public libraries. A separate LSCA Section was established with the addition of a chief, three more extension specialists, and a reports unit. In 1966 the Act was again extended for five years, through fiscal year 1971, and two new titles were added. Title III provides funds for the establishment and operation of cooperative networks of libraries; Title IV provides funds for assisting State institutional library services and library services to the physically handicapped.

The major accomplishments of LSCA can be identified in the following major categories: strengthening of State library administrative agencies; organization of larger, more efficient library systems, including greater centralization of selected functions or services; surveys and studies; recruitment, training and scholarship programs; and improved State standards and State aid.

B. Title II-A (College Library Resources) of the Higher Education Act of 1965

Federal funds are made available under Title II-A to assist and encourage institutions of higher education in acquisition for library purposes of books, periodicals, documents, magnetic tapes,

May 23, 1967

phonograph records, audio-visual aids, and other related materials (including necessary binding). The law authorizes funds for basic, supplemental, and special purpose grants. Basic grants may not exceed \$5,000 each and must be equally matched by recipients. Supplemental grants may not exceed an amount at the rate of \$10 for the equivalent of each full-time student with no matching requirements. Grants for special purposes include those to (a) help meet needs for quality in the educational resources of institutions, (b) meet special national or regional needs, and (c) help combinations of institutions meet special needs in the establishing and strengthening joint-use materials which must be matched by an institutional dollar for every 3 Federal grant dollars. An Advisory Council on College Library Resources which was appointed by the President in July 1966 advised the U. S. Commissioner of Education on criteria for making supplemental and special purpose grants.

President Johnson signed the second 1966 supplemental appropriations bill on May 13, 1966 which provided \$10 million for basic grants under Title II-A for fiscal 1966. Application forms and guidelines were sent to academic institutions in the same month, and the Division of Library Services and Educational Facilities began the processing of grant applications. Federal grants totalling approximately \$8.4 million were approved for 1,830 institutions of higher education.

The Labor-HEW Appropriations Bill for fiscal 1967 which was approved and cleared by the President's signature in October 1966 included an appropriation of \$35.3 million for all Title II programs of which \$24.5 million was designated for II-A (College Library Resources). This appropriation--as in any given year under this legislation--is divided as follows: (1) 75 percent for Basic Grants, (2) 10 percent, plus any unused portions of funds reserved for Basic and Special Purpose Grants, for Supplemental Grants, and (3) 15 percent for Special Purpose Grants. A total of over 4500 applications under Basic, Supplemental, and Special Purpose grants were received from some 2,100 institutions of higher education for fiscal 1967 grants by the deadline for applications, midnight, April 10, 1967. At this time (May 16, 1967), final stages of processing are being completed and notification of grant awards will be made shortly.

C. Title II-B (Library Training) of the Higher Education Act of 1965

This title authorizes grants to institutions of higher education to assist them in training persons in librarianship. Provision is made for establishing and maintaining fellowships or traineeships for students undertaking such studies and for support of institutional costs for such courses of study. The authorization for appropriation is \$15 million for each of the fiscal years 1966, 1967 and 1968. Congress may authorize appropriations for fiscal years 1969 and 1970.

As authorized under this legislation, the Office of Education awarded 139 graduate fellowships in library and information science totalling \$898,941 for the academic year 1966-67. Of the fellowships grants, 52 were for doctoral study, 25 for intermediate or post-masters study, and 62 for study at the master's level.

Fellowships in library and information sciences will total some \$3,750,000 in fiscal 1967. The deadline date for applications was midnight, April 10, 1967. Early in May the Division of Library Services and Educational Facilities announced that 501 grants for graduate fellowships in library and information sciences were made to 38 universities in 24 States and D. C. The grants total \$3,733,250. Included are 327 fellowships for masters, 58 for post-masters and 116 for doctoral degrees. In fiscal year 1968 the Title II-B library training program will be expanded to include the institute format formerly authorized under the NDEA.

D. Development of the Basic Program of the Division

The Basic Program or consultative work of the Library Services Branch which was not directly connected with the administration of specific grant programs also expanded after passage of the Library Services Act. In 1958, the Basic Program consisted of an academic, public and school library specialist under the direction of the Assistant Branch Director. Later additional staff appointments brought specialists in children and young adults services in public libraries, library education and research libraries. A second school library specialist was added whose position eventually became focussed on the processing of school library materials.

The advent of substantial Federal grant-in-aid programs in the field of library services and the consequent reorganization of the Office of Education tended to alter the emphasis of the Basic Program. One action was the request of the two school library specialists to be transferred to the administration of Title II of the Elementary and Secondary Education Act, administered by the Bureau of Elementary and Secondary Education. These unfilled positions have remained in the Division and active steps have been under way for some time to recruit appropriate specialists for these positions.

The Basic Program in previous years had had a strong publications program. Under the future reorganization it is anticipated that there will be an increased number of publications issued by the Division.

An outline or resumé of the consultative or leadership function of both the Basic Program and the Grant Programs of the Division over the past years can perhaps best be illustrated by activities performed by the professional staff:

- * Provides consultation and technical assistance to State library agencies and State departments of education, local libraries and their governing bodies, Federal Government agencies, educational institutions, professional associations, and business and industrial organizations.
- * Assists school, college, university, research, State, special and public libraries in developing and carrying out their full responsibilities in achieving standards of service to their respective users.
- * Plans and conducts workshops, institutes, and conferences on library problems of national and regional significance.
- * Assembles, evaluates, and disseminates information on the administration and organization of libraries and library schools, including the compilation of standards, good practices, and bibliographies.

- * Works on solutions of library personnel problems, including professional education, inservice training, shortages in number of qualified librarians, recruitment, and certification.
- * Supports programs advancing the use of libraries in formal and informal educational activities with the objective of reaching people on all educational and economic levels.

E. Reorganization of the Office of Education on July 1, 1965

After the signing of the Elementary and Secondary Education Act of 1965 which authorized an appropriation of \$1.3 billion for the first year, President Johnson ordered a White House task force to study the organization of the Office of Education and to develop recommendations. Office of Education staff had doubled in the previous three years and its budget had increased six times in this time period. Changes in organization were needed to carry out increased responsibilities and programs.

The Commission put the reorganization, based on the work of the task force into effect on July 1, 1965. The former three major Bureaus which were functionally organized--the Research and Development Programs, Educational Assistance Programs, and International Education Programs, became four major Bureaus based primarily on levels of education: Bureau of Elementary and Secondary Education, Bureau of Higher Education, Bureau of Adult and Vocational Education, and a Bureau of Research. A National Center for Educational Statistics was established, reporting directly to the Commissioner, in order to centralize all statistical staff and services of the Office of Education. In January 1967, a Bureau of Education for the Handicapped was created to strengthen and coordinate activities in behalf of the handicapped.

In this major reorganization, the Division of Library Services and Educational Facilities (named from combining the Library Services Branch and the Educational Television Branch) became part of the Bureau of Adult and Vocational Education.

One change in the staffing and program of the Library Services Branch was the transfer of six staff members who edited and prepared the library statistics for publication and the Assistant Director and a secretary who supervised the statistical program to the National Center for Educational Statistics.

Under the 1965 reorganization, the Division, in addition to its ongoing Basic Program, is responsible for the administration of programs under the Library Services and Construction Act (the continuation of the Library Services Act) and of the academic library resources and library education programs authorized by Title II of the Higher Education Act of 1965. The responsibility for administration of the library research and demonstration program under Title II-B was placed with the Bureau of Research. The reorganization placed the administration of library programs under Title II (School Library Resources) of the Elementary and Secondary Education Act under the Bureau of Elementary and Secondary Education. Grant assistance in the funding of academic library construction, authorized by the Higher Education Facilities Act of 1963, is administered by the Division of College Facilities of the Bureau of Higher Education.

IV. The Future

A. Recent Reorganization of the Division

A reorganization of the Division of Library Services and Educational Facilities which has just gone into effect this month will make it possible for the Division to fulfill its present responsibilities more adequately and gives it the organization and staffing to meet still greater future demands. The activities and responsibilities of the Division are to be administered in four branches:

1. Library Program and Facilities Branch - Headquarters administration of the Library Services and Construction Act.
2. College Resources Branch - Administration of Title II-A (College Library Resources) and Title II-B (Library Training) of the Higher Education Act of 1965.

3. Library Planning and Development Branch - Responsibilities include assessing national library needs; surveying national developments; helping develop legislative proposals; coordinating relationships with other Federal agencies and professional organizations; providing consultative services to other OE staff, either in Washington or the regional offices; and collecting and developing national data on library grant activities and programs.
4. Educational Television Branch - Continuation of the existing branch which is responsible for the administration of a grant program for the establishment of educational television facilities.

In addition to the reorganization of the headquarters program, another major change in the Division is the shifting of the function of the LSCA Library Program Specialists to the nine OE regional offices. Under the supervision of the Regional Director of the Bureau of Adult, Vocational and Library Programs, these specialists will be responsible for administering the State grant program under four titles of the Library Services and Construction Act. In addition, each of these regional specialists will be responsible for regional consultant services connected with II-A (College Library Resources) and II-B (Library Training) of the Higher Education Act. By being physically located in the geographic areas they are to serve, the Library Program Specialists will be able to identify more closely with library needs, problems, and opportunities in the various regions. They will look to the Division for guidance, and great effort will be made to assure the effective communication between regional office and headquarters specialists will be a faculty of experts to be utilized by the regional staff as they work with State agencies and institutions.

The Division of Library Services has been strengthened through the reorganization and allocation of professional positions. This recruitment of outstanding personnel is now underway.

B. Objectives in Library Services

Specific objectives of the Office of Education in its services programs supporting libraries and librarianship are:

1. Develop methods and standards for planning and evaluating library service programs.

2. Seek out and stimulate new ideas and innovative programs, encourage their implementation and the effective use of technological advances.
3. Promote a national network of libraries and information centers.
4. Identify obstacles to library development and promote needed research to eliminate such obstacles.
5. Assist in the further development of all types of libraries and encourage appropriate participation by libraries in Federal programs.
6. Strengthen State library agencies to enable them to fulfill their role in statewide library development, and encourage interstate library cooperation.
7. Promote quality preservice, in-service, and continuing educational programs for the preparation of all types of library personnel.
8. Encourage effective utilization of library manpower.
9. Foster the development of public understanding and support of library services.
10. Encourage effective correlation and coordination of those Federal programs affecting library services.
11. Encourage coordination of library related activities among Federal and State, local and private agencies, and professional associations.
12. Encourage the advancement of library services through liaison with international organizations and foreign nations.
13. Stress the creation of specially designed library services for the disadvantaged and handicapped in the community and in institutions.

14. Utilizing all relevant Federal programs promote the development of library networks based upon metropolitan areas, regional service areas and interstate compacts.
15. Stimulate library programs which are more responsive to the needs of pre-school, in-school and out-of-school youth within their environment.
16. Encourage the establishment of school libraries in all schools with 200 pupils or more.
17. Advise the Commissioner on needed legislation to strengthen and improve library services in support of all educational activities.

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OF THE
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GIVEN BY
Commissioner Howe and Staff
U. S. Office of Education
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Appendix N

LIBRARY AND INFORMATION SCIENCES RESEARCH PROGRAM

A brief review of the Library and Information Sciences Research Program rounds out the resources available through the Office of Education to help strengthen and develop an effective and efficient library system for the Nation.

Well before funds were first authorized, the Bureau of Research arranged for a series of ad hoc conferences with outstanding practitioners, researchers, and educators in librarianship and information sciences. The concrete result of these conferences was the program guide which has been distributed broadly to acquaint individuals with the program. In addition, staff continue to draw daily from the many excellent ideas and suggestions that came from the three conferences.

The seven areas emphasized at the outset of the program, and, as based upon the combined judgment of leaders in the fields involved, are: education for librarianship; information about use and users; organization of library and information services; role of libraries and information centers in society; integration of library services in school and academic instructional programs; control of resources; and, applications of technology to library operations.

Response from the field has been excellent and proposals have been received on all these topics. By the end of the fiscal year we expect to obligate all the \$3.55 million available. Through rigorous staff screening, only about one-third of all inquiries received resulted in the submission of formal proposals.

As you know, among the first grants made was the one to Duke University for support of the studies requested by the National Advisory Commission on Libraries. Other projects to be funded this fiscal year include: a national study on a very broad basis into many aspects of library manpower by the University of Maryland; a study into the economic basis for giving library service from a large city library to non-residents in the surrounding metropolitan area as part of the Detroit Metropolitan Library research and demonstration project; a project with the Institute for Library Research at the University of California for the design of a model computer-based library science laboratory to teach students how information processing technology can be applied in libraries of the future; a study under Von Foerster at Illinois on basic research into the mathematics that have to be formulated before the really large complex information system can be built; and a study by the Yale University Library Research and Development staff on user requirements in a large library with the characteristics and capabilities of computers in mind in an attempt to determine which features of conventional library practice should be retained or altered in a computerized system in order to achieve better user service or more economical processing.

Experience gained from managing the \$100 million program of the Bureau of Research is being applied to the development of the Library and Information Sciences Research Program. We will continue to make funds available to support proposals submitted by individuals to develop projects they believe are important, while some funds will be used to develop and sustain major programs of focused research and development activity. This arrangement will guarantee support of good ideas, regardless of their focus, content, and, up to a limit, cost. The small project, generally up to \$10,000, is a valuable type of support to begin a project, test an idea, explore a new area, or otherwise bet that a good man with some additional resources will come up with some valuable results. Larger scale and more expensive projects based on initiative from persons at universities, in professional organizations, or in other public or profit-making organizations also will be supported on their merits. In addition, however, a limited number of topics or problems require sustained and systematic exploration. Based upon the counsel and advice of the Advisory Committee on Library Research and Training Projects, authorized by law, and other consultants, we plan to focus attention on topics such as the following:

1. Refinement in projections for library and information science manpower requirements, specifications of role performance for emerging occupations in these fields and the training prerequisites for these roles.
2. Development of empirically validated curricula for the education of persons for emerging roles in librarianship and information sciences, employing where possible individualized and multimedia approaches to learning.
3. Prototype development and operational testing of an undergraduate library employing as fully as possible microform and the latest technological advances in the communications industry.
4. Tests of several ways of combining library resources with classroom teaching.
5. Operational tests of methods for integrating outputs from information systems such as MEDLARS, ERIC (Educational Research Information Center), NASA, etc., with academic library resources.
6. Operational tests of the feasibility of State-wide or regional networks employing centralized cataloging and bibliographic control, on a computer time-shared basis, to eliminate or greatly reduce present duplicative and costly efforts.

Future development of the Library and Information Sciences Research Program will be accelerated and assured by many side benefits that occur to this Program from its administrative home in the Bureau of Research. First, the program is located in the Division that includes closely related activities. Partly because of the Library and Information Sciences Research Program, the Division in which it is placed, now is, or soon will be, entitled the Division of Information Technology and Dissemination. In this Division are the Library and Information Sciences Research Branch, ERIC (Educational Research Information Center) - the first national information system to serve education -, the Educational Materials Center, the Equipment Development Branch, and the Research Utilization Branch. Staff in these Branches, not only include several librarians and about a half dozen information science specialists, but, also, behavioral scientists, educators, and soon, an engineer or two. Consequently, staff responsible for the Library and Information Sciences Research Program can have the assistance of specialists from a variety of disciplines in developing program ideas or in reviewing proposals.

Secondly, additional resources from other Divisions in the Bureau of Research are used to support the staff immediately responsible for the Library and Information Sciences Research Program. These include specialists in curriculum design and development, computer-assisted instruction, administration and management, basic research and methodology, and those interested in emerging occupational roles--especially job skills that can be provided through junior and community colleges.

These are not the only resources in the Office of Education available for developing the Library and Information Sciences Research Program. The Division of Library Services and Educational Facilities also provides important consultation and assistance. With additional staff soon to be added to the Division of Library Services and Educational Facilities, even more coordination will be possible between the research program and the facilities, training, and related library programs.

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Appendix O

Status of Existing Library Statistics Publications Of
The Office of Education

1. College and University Libraries

The ALA, with funding from OE and the cooperation of the University of Wisconsin, has done an excellent job in collecting and publishing the institutional listings for 1965-66. In contrast, the OE listing collected as part of the Higher Education survey is not scheduled to go to the printer until August 1967.

The similar listings for 1964-65 have been the victim of problems of our mechanical changeover and we have had to return it to the contractor for re-doing for a third time. Hopefully, this will be the last time and we will have the publication, at least in multilith form, by early summer.

The analytical report for 1963-64 which includes a considerable amount of trend data has been forwarded for publication. Another analytical report is planned for next year based on 1966-67 data. We anticipate that this analytical report will tie in closely with the analysis of Title II A of the Higher Education Act by publishing more information on books and other resources.

Our 1966-67 survey of college and university libraries is again planned as part of the Higher Education General Information Survey and the forms will be mailed this summer, with reporting dates extending to December 1. Our procedures should be better organized and our publication schedule should be better than last years.

The obtaining of library information through the HEGIS will also make it easier for us to coordinate the information on library education and we are planning to publish a new report "Degrees, Faculty, and Students in Library Education Programs." This report will assemble these three types of information for individual institutions

and will provide information in support of Title II B of the Higher Education Act. In addition, we are planning a survey of library education programs similar to those we have conducted in the past to supplement this report.

2. Public Libraries

We have prepared a report of public libraries in cities of 25,000 or more for 1965 and tables on this survey will be available in multi-lith form by the end of June, with final publication in some form during the summer.

For libraries in cities under 25,000, we have learned that the type of questions we have used are not appropriate for the patterns which exist in smaller communities. The results have not been meaningful and we are now considering what forms for small libraries will be needed for a new survey of public libraries. Our plans have not yet advanced far enough to establish a time schedule for a new survey.

We have considerable detail on public libraries in 1962. The institutional data for cities of 35,000 and over have been published by us.* We plan no further publication, except possibly for a few special studies, largely because our policy has been to concentrate our resources on the more recent material. This information is available for reference questions and can be made available, under proper arrangements, for research purposes.

3. School Libraries

We have some information on libraries in non-public schools which will be published with the report on that area.

We are contemplating a survey of school libraries to be taken in the fiscal year 1968, but, as yet, our plans are not far enough along to provide specific estimates as to timing.

We are, however, contemplating that our basic survey will consist of a sample of individual schools within districts so that we can gather better information on the distribution of resources. We may also find it advisable to try to reconstitute information for 1964-65 as well as 1966-67 in order to develop a picture of library resources before and after the Library Services programs started operation,

*The data for cities under 35,000 has been published by the University of Illinois, but the quality of data is such that we recommend their use with extreme caution.

4. Special Libraries

In two areas of the special library field -- Federal and State libraries -- some information is now available. The information on Federal Libraries was developed by the Federal Library Committee and will be reported by their secretary. The State library report was prepared by the Office of Education and will be available through the ERIC system.*

We have started to explore the possibility of surveying the existence of libraries in industry through other Federal Government surveys.

* Copies (either microfiche or hard cover) will be available from Bell & Howell.

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SUBMITTED BY
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Appendix P

Introduction

An unprecedented demand is being placed on this country's library and information services. Student and adult use of all types of libraries is multiplying. The billions being spent for research and development are producing a body of scientific literature that is doubling in size every 8 to 10 years. Old-line methods and equipment are no longer able to handle this information workload. As a result, and at a cost of millions of dollars, many new library and information services are being set up throughout the country--often without benefit of basic studies of customers' actual information needs and the costs of satisfying them.

In response to this growing national need for better library and information services, Congress, under Title II-B of the Higher Education Act of 1965, has authorized the Office of Education to initiate a research support program concerned with the use of library resources, the development of library and information services, and the training of librarians and other information personnel. To support the program's first-year research effort Congress has appropriated \$3,550,000 for projects which hold the promise of improved services and practices for all types of libraries. The program is administered within the Office of Education by the Bureau of Research's Division of Research Training and Dissemination.

Eligible Applicants

Under Title II-B of the Higher Education Act of 1965, the Commissioner of Education is authorized to award grants to school districts, colleges, universities, State governments, and other public or private nonprofit agencies, organizations or groups after proposals have been

recommended for approval by Office of Education staff and appropriate non-Government advisory personnel. Contracts, as separate from grants, are also authorized with public or private profit or nonprofit agencies, organizations, or institutions.

Areas of Research

Research subjects are as varied as the questions confronting individual librarians and information scientists. Among the critically important topics suggested to the Office of Education in the library and information community are the following:

- Education: the techniques, philosophy, and scope of training and education for librarianship.
- Use and Users: information and reader services; expressed and unexpressed goals for different kinds of users (students, specialists, and the public); variations in user patterns caused by geographic, economic and other factors.
- Organization of library and information services: administration, management, personnel (including manpower utilization, job description, and staffing), finance, and governmental relations.
- Role of libraries and information centers in society: purposes, values, goals; relationships with other educational and cultural institutions; influence of various communication media; public relations; recruiting; the profession of librarianship.
- Integration of library services in school and academic instructional programs: curriculum development, school planning, and, in particular, instructional programs at the elementary and secondary levels.
- Control of Resources: documentation; book and card catalogs; subject analysis; classification; indexing; abstracting; provision of an optimum collection for teaching and research needs; network and system planning and analysis; automation (software).
- Technology: preservation of materials; storage and physical access; reprography; automation (hardware).

Types of Projects

A range of project types can be supported:

- State-of-the-art studies: collection and integration or interpretation of existing research (may include stage of development of each of the subjects within an area; should include a ranking by priority of research efforts to be expended in each subject field).

- Feasibility studies: identification of the need for and feasibility of research, development, or other research-related activities within a clearly defined subject field (should include cost estimates and manpower requirements as an aid to planning).

- Prototype development and hypothesis generation: formulation of an hypothesis or the development of a model to aid in the solution of a problem (should include the methodology for testing and the criteria for evaluation).

- Testing and evaluation: test of hypotheses or models in a controlled situation and evaluation of the results (should include conclusions and generalizations deduced from the results).

- Demonstration and implementation: application of the generalization to a noncontrolled situation to verify and, if necessary, to modify the formulation developed (should serve as a means for making necessary adjustments to fit a realistic setting).

Amount of Support

The Small Projects Program is designed to facilitate exploratory research hypothesis generation and theory building, analysis of existing data, or pilot studies which may serve as the first stage of a larger research or demonstration activity. Applications for support under this program are funded with minimum delay. Support may be approved for as long as 18 months and to a maximum of \$10,000 including both direct and indirect costs.

Funds also are available for support of projects in excess of \$10,000. The decision to support is based on the overall merit of a proposal; the amount to be funded, however, is determined by Office of Education staff at the time of grant or contract negotiations.

Submission of Proposals

A common format is required for all proposals formally submitted under any research program administered by the Bureau of Research. Guidelines are set forth in two Bureau of Research booklets, Support for Educational Research and Related Activities, and Small Project Research, both available upon request.

Informal proposals may be submitted to the Library and Information Science Research Branch at any time for comment, criticism, and discussion. Formal proposals should be sent to the Research

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Analysis and Allocation Staff, Bureau of Research, Office of Education, Washington, D. C. 20202. They may be submitted at any time, although up to six months should be allowed between date of submission and the expected start of the project.

Evaluation of Proposals

Proposals are evaluated according to the following criteria:

1. Significance of the proposal to the Office of Education's responsibility in the total library and information science research effort; that is, to provide balance with available funds, it may be necessary to forego support for one worthy project in order to finance another in a neglected area.
2. Place of the proposed study in relation to existing knowledge, and its promise of making a contribution to the improvement of library or information science.
3. Sound design or operational plan; indication that the proposed research will meet its stated objectives
4. Competent personnel and adequate facilities.
5. General applicability of local projects; they must be significant in other settings.

For further information write:

Library and Information Science Research Branch
Division of Research Training and Dissemination
Bureau of Research
Office of Education
Washington, D. C. 20202

National library functions

by K. W. Humphreys, Librarian,
University of Birmingham Library

Introduction

The present paper is an extension of that presented to the National and University Library Section of the International Federation of Library Associations (IFLA) at Rome in 1964 ('The role of the national library: a preliminary statement', *Libri*, vol. XIV, 1964, p. 356). The Rome paper was to have been preliminary to a full-scale statement on the functions of a national library to be compiled in the light of the discussions there, but no discussion was, in fact, possible at Rome. However, a very useful meeting was held in Helsinki in August 1965 at which the paper was approved for publication, with certain amendments incorporating the suggestions put forward by members of the section.

I have also taken note of the discussions held at Manila in 1964.¹

In attempting to classify the functions of a national library system which may be undertaken by the national library, I have assumed that a country has only one such library (see illustrations). Of course this assumption will not be true of many large and highly developed countries, but it may be true of smaller, newly emergent countries—and it is mainly for these that I am writing. At the same time, for reasons of brevity, I have not here discussed the effect on a national library's functions of its accepting additional responsibilities as a university library or even as a city library, although this may be the position of the national library in a small country.²

I examined the various activities of several great national libraries (see *Libri*, vol. XIV, 1964, p. 356 ff.) and classified them according to my own view as to their appropriateness to the aims of national libraries generally. Where there is only one national library and bibliographical centre, it must probably accept all the responsibilities mentioned and there are many advantages in centralizing them.

In the following pages, I have divided the national library activities into three categories—essential, desirable and inessential. There will be some shading over between the categories I have designated but the distinctions, however rough, will indicate the general trend of my proposals.

I regret that in order to be able to publish some account of my views on this subject in this journal it has been necessary greatly to compress my original statement. I hope that it will be possible to issue a full statement later.

1. *Unesco bulletin for libraries*, vol. XVIII, 1964, p. 149-64.

2. Cf. C. Wormann. National libraries in our time. *Libri*, vol. IX, 1959, p. 273-307.

Fundamental functions of a national library

The outstanding and central collection of a nation's literature.

Whatever other function of a national library is undertaken elsewhere, the collection of the nation's literature is its basic aim. The types of material which are included in this collection may vary according to the country's particular needs and historical development, and the national collections may, as in many countries, be preserved separately from the other collections. Obviously, however, printed literature must be fully covered, although there will be some division of opinion about the value of retaining centrally such items as local newspapers, book-jackets, jobbing printing of all kinds, diaries and similar ephemera. Arrangements should be made by the national library to ensure that university, public or special libraries maintain files of local newspapers and other material of regional, rather than national, interest.

The national library should receive at least one copy of every book published in the country (see '*Dépôt légal*' in the next section), all privately printed items and all books printed abroad which describe any aspect of the life and cultures of that country. In some libraries, like the British Museum, no attempt is made to obtain the vast number of editions of translated works, but a selection, at least, of the first issues of such translations should be acquired. National libraries should not, however, take too narrow a view of this aspect of acquisition—particularly in the newly emergent countries.

The acquisition policies of national libraries will vary from country to country. The collection of printed books and usually of manuscripts will be common to most, but other types of material may not always be included. Maps are commonly deposited under the *dépôt légal*, as also are music scores, but gramophone records, films, engravings, medals, coins and magnetic tapes (recording sound) are not always so treated. In some countries gramophone records are deposited in the national library to accompany, as it were, the musical scores. The Library of Congress not only receives films, but also publishes a catalogue of them as a section of the national union catalogue.

Many European national libraries have included in their functions the preservation of engravings, coins and medals, but in countries where national library services are developing these items would be better dealt with in a national museum or art gallery.

Editions of books, periodicals, theses, etc., which are produced only in microtext form should be considered in the same way as editions of printed books and preserved accordingly. The national library should also attempt to have a complete collection of printed books in microtext or other photocopy form when no copy is available in the country. A number of national librarians have also initiated the copying of manuscripts held in libraries outside their own countries which are known to have been produced originally in their countries. Some libraries also undertake the planning of a national scheme for the microfilming of domestic and foreign newspapers; this operation may facilitate the publication of a union catalogue of newspapers.

It is assumed that all current published material will be obtained by means of *dépôt légal*. All other national publications which are not received by gift will need to be purchased. It is, therefore, vital that adequate funds should be available to the national library for purchases. These will generally be of two types—recurrent and non-recurrent. The recurrent grant will be used for normal day-to-day acquisitions, but will probably not be sufficient for the occasional important—and therefore usually highly expensive—item which is offered through private sale or in the market. The national library must be always in a position to apply for additional money to buy these outstanding books or manuscripts so that they may not be lost to the country. In countries where the financial resources

of the national library are not sufficient to ensure the retention in the country of any item of national importance, then the literary (including the scientific and artistic) heritage of the nation must be safeguarded by other means. Many countries have found it necessary to set up some machinery for the control of the export of books and manuscripts. Legislation designed to stop the outflow of the nation's literature must be fully effective and not, as is the case in Britain, only partially satisfactory.

What is the proper use of the national collection? Unique and very rare items in the library should not, of course, be available for loan and, if the national library is to take part in the country's inter-library lending scheme, probably it should restrict this function to duplicated items and to more recent material. General access to the books in the national library for consultation should, in theory, be granted to any member of the public, although in practice this privilege would not be given to anyone irrespective of the level of their requirements.

Dépôt légal

Dépôt légal may have several aims—to protect the rights of authors, to maintain a system of press censorship and to ensure the preservation of a nation's literature in a national library. The earliest attempt at legal deposit was aimed at the enrichment of a library. By the Montpellier Ordinance of 28 December 1537, every printer and publisher in France was required to send a free copy of every new book published to the Royal Library at Blois. The earliest British arrangements were made with a similar object in view, but the later depository scheme has been associated with the law of copyright and therefore with the rights of authors. This, however, is unusual; the majority of European countries operate a system designed to benefit scholarly libraries. This does not, however, exclude another form of obligatory deposit. In Spain and Italy a deposit in connexion with an author's rights is maintained in addition to the legal deposit, and in Germany, France, Luxembourg, Sweden and certain East European countries one copy must be delivered for censorship purposes as well as one by legal deposit. In these cases the one copy is delivered to an administrative department of the State which may pass it on to a library freely or by statute.

Whatever method is used and whatever the purpose of legal deposit, in every country at least one copy of everything printed or published should be legally required to be deposited in the national library. The obligations of printers to the national library should also be complemented by a regulation binding the national library to retain, preserve for posterity and make available to the public, one copy of everything delivered under the law.

There is considerable variation in the number of copies which are deposited, ranging from only one in a few countries like Japan to as many as forty-one copies of certain kinds of material in the U.S.S.R. In some countries the regulations for the number of copies deposited of periodicals, official publications, engravings, films and sound recordings differ from those for books. In the case of official publications it is common practice to receive extra copies for exchange purposes.

In most countries one copy only is considered inadequate. In order that at least one copy of everything published may be preserved the national library should be in a position to obtain, preferably by legal deposit, not less than one additional copy for loan or to replace items in constant demand. It has been represented to me that three copies should, ideally, be supplied—one for normal use, one to be available on inter-library loan and one to be preserved. The practice in a number of countries of providing additional copies for regional libraries is obviously of great benefit to scholars, supplementing the services offered by the national library. It is, however, a great mistake to treat all these copies as reference-only material, as has happened in the United Kingdom.

As for the number and the nature of the copies required to be supplied by legal deposit, it is assumed that all items must be complete and perfect and in the usual state as retailed to the public. Where a work is produced in a normal and a 'de luxe' edition, the national library should receive copies of both editions.

The regulations in most countries which impose the duty of legal deposit normally require the printer or the publisher to present the copies, although one or two put the onus on the author. It would seem sensible to expect the publisher to deposit copies of his productions, except where works are unpublished, and then the printer should be held responsible; it is too heavy an imposition to place on the author. The law should include some administrative and punitive sanctions in the event of non-execution of the act of deposit. In some countries the depositor is required to make restitution to the libraries concerned, which can institute legal proceedings for non-compliance with the law. Other sanctions include requisitioning of copies, demanding a photographic reproduction of a work no longer available in the original, and seizure of the whole edition of the work which, until deposit has been made, is on sale illicitly. In Italy the printer can be prevented from carrying on his trade for a period of three months or more, while in the United States of America, where the author's rights are connected with deposit, the author can lose his copyright.

It has been laid down above that the national library should receive at least one copy of everything that is published or privately printed and that the law of legal deposit should require the depositor to send his copy direct to the national library.

The copy which is delivered should be dispatched to the national library before the date of publication although, of course, it cannot be made available to the public earlier than the publication date. The national library which should be responsible for, or should house, the national bibliography will be in a position to prepare entries for the bibliography which can then be issued simultaneously with the publication of the books it lists. The major criticism of the legal deposit system in which books are sent to government departments in connexion with press control is that the departments cause long delays in dispatching material to the national library. In cases where a book is banned or censored it should be included in the normal deposit but retained separately from the other material and not made available to the public until, if ever, the ban is lifted.

Finally, it should be stressed that no matter for what purpose the legal depository system of a country has been instituted, the important consequence is that the national library should receive all the books, periodicals and whatever other material it has decided to collect which are printed or published in that country. Although the national library will receive the benefit of free copies of the production of its national press it must at the same time accept responsibility for the many tasks which follow from legal deposit.

Coverage of foreign literature

At the Vienna meeting on National Libraries in 1958¹ the role of the national library in the provision of foreign literature within its own library and within the country generally was fully discussed and it was recommended that a national plan for the acquisition of foreign materials should be established in countries where no such plan exists. It was clear from the discussions that members were concerned that a country should have as full a coverage as possible and also that there were doubts in the minds of many about the efficiency of the continuing encyclopaedic nature of a national library. It was felt that the enormous growth of the world's literature and the changing attitude of readers had created problems which a monolithic type of library could not solve without

1. *National libraries: their problems and prospects. Symposium on national libraries in Europe. Paris, Unesco, 1960.*

radical reorganization. In order to meet the problem of size many members of the symposium looked, it seems, with some envy at the example of large university libraries which, especially in the United States, tend to decentralize their collections. In view of the methods proposed, however, it is clear that any process of separation of parts of the collection is expected to be based on subject divisions which reflect the interests and the varying methods of working of different types of scholars. It is often suggested that, for example, science, medicine and the social sciences all demand different approaches from those of the humanities and that they should be split off from the old national library, leaving it to devote its attentions only to the humanistic subjects. This is surely, however, a counsel of despair and accepts the view that the new methods of librarianship cannot be adopted by the national library; clearly this is not necessarily true.

The hiving-off of subjects of this type from the national library may be the means of offering scientists and scholars a service which the national library is unable to provide. In countries where it is possible to support only one central library it is important that even though it is under one roof it should be divided according to the many functions it must perform. It is necessary for example to have reading areas for manuscripts, maps, prints and drawings separate from those for printed books. The traditional single, monumental reading-room should be replaced by several reading-rooms devoted, for example, to science, medicine, law, economics and social sciences, languages and literatures, history and geography. Each of these rooms should, as far as possible, be contiguous or one above the other, and connected as closely as may be practicable to the bookstacks. All material should be processed immediately on receipt and made available to readers and, in addition to their library training, the staff should have had professional training in the subjects with which they are concerned.

The question of co-ordination is central to the role of the national library in relation to the coverage of foreign literature throughout the libraries of the country. The immense range and scope of foreign scholarly literature is a formidable barrier to full coverage by one library and it has been usual to share this responsibility among a number of libraries. Thus, the important co-operative schemes of this type—the Farmington Plan in the United States, the Scandia Plan and the West German system organized with the aid of the Deutsche Forschungsgemeinschaft—are relevant to this study. Under the terms of these plans the co-operating libraries ensure varying degrees of coverage of foreign literature. The Americans have been very careful to make critical surveys of the results of their Plan and have shown that it has enabled the United States to collect a large number of important items which would not otherwise have been acquired by any American library.

Nonetheless there have been many criticisms of the scheme and more recently strong doubts have been expressed about the usefulness of dividing up the fields of knowledge among a number of libraries. It has been suggested that it would be preferable for the national library to collect all material from all countries to be made available for loan to any library. The particular advantage of this arrangement, it is advocated by its proposers, is that the national library is in a position to offer catalogue entries not only for the books published in the country, as it is a depository library, but also for books in all other languages. The national library can therefore offer a centralized cataloguing service based on the co-operative acquisitions scheme and reach a high standard of inter-library lending without the necessity of maintaining a fully comprehensive union catalogue.

Whatever method is adopted the national library should encourage the collection of a wide coverage of the scholarly literature of other countries. It should be at the centre of any plans for developing the resources of the libraries in its country. If it can combine a coverage scheme with inter-library lending and shared cataloguing, it will have made a splendid contribution to the national library system.

Publication of the national bibliography

The publication of the national bibliography is related to the practice of *dépôt légal*. When the current national output is deposited at the national library it is usual for that library either to prepare the national bibliography itself or to house the organization responsible for compiling the bibliography. Where the *dépôt légal* is centred on a bibliographical institute or other non-library institution the national bibliography may be prepared there. In East European countries the book chambers which collect the national or republic literature produce the national or republic bibliography. Whatever system is used for the collection of the *dépôt légal* it is vital that the books should be received immediately after publication or, if possible, before the publication date so that the national bibliography may be compiled and issued with no delay. Unfortunately many existing national bibliographies do not appear until several months after the publication date of the books they record.

The form in which the national bibliography is published will depend on the needs of the publishers, booksellers and librarians in each country. Normally, weekly parts are cumulated into quarterly or annual volumes. Each entry may also be available on a card or a slip for sale to libraries.

The content of the national bibliography varies considerably from country to country. 'If we examine the impressive series of current national bibliographies now available we can see clearly that there are certain fundamental differences between them: some cover all printed publications in a single language (for instance, *Bibliographie de la France*, *Deutsche Bibliographie*), others cover all publications printed in all languages in one country only (for instance, the Yugoslav bibliography), others again contain not only publications printed in the given country or in its languages, but also foreign publications of interest to it on account of their authorship or subject (*Bibliographie de Belgique*). Bibliographies differ too in the type of material they deal with. Some include maps, atlases, plans, engravings, prints and musical scores, as well as printed and multigraphed publications (the German and Austrian bibliographies); others include these types of material in supplements (*Bibliographie de la France*); and others again omit these types of material either altogether, or in part (the *British National Bibliography*). It might perhaps be possible to reach agreement on the categories of material to be included in national bibliographies.¹ Certainly any co-operative effort aimed at uniform treatment of material to be listed in national bibliographies would be very welcome.

National bibliographical information centre

A conference on the improvement of bibliographical services was held by Unesco in November 1950, and among its recommendations was the proposal that every country should establish national planning bodies (a) to promote the development of bibliographical and information services; (b) to stimulate research in the field of bibliographic methodology and to serve as a clearing house of information about research completed or in progress in that field; (c) to co-ordinate the various tasks, and assist in the determination of priorities; and (d) to act as a link with international bodies concerned with the planning of bibliographical and information centres.

Such a planning body may be either the national library or a distinctly separate organization or, perhaps preferably, a separately administered body housed in the national library. Of course, if the national library has the privilege of legal deposit and maintains the national union catalogue, no other library or institu-

1. Mirko Rupel. The bibliographical activities of national libraries. *National libraries: their problems and prospects*. Unesco, 1960, p. 32.

tion in the country will have comparable sources of information. The specialist knowledge of a large staff backed by the finest library resources in a country will also be a vital element in the servicing of the bibliographical centre. However, in many countries with well-established national libraries there is a serious lack of accommodation and the out-dated methods of processing materials used in some national libraries are not conducive to the acceptance of the new attitudes to bibliographical work requisite for the establishment of a national bibliographical centre. For these reasons an autonomous centre, housed in or adjacent to the national library, may be more satisfactory than a centre which is an integral part of the library.

The Unesco conference also made more detailed recommendations concerning the functions of the centre. In all countries the national library would be the co-ordinating centre for all specialized information centres. Where certain libraries are concerned with particular subject fields they will be in a better position to prepare specialist subject indexes than the national library, which should stimulate the compilation and even the publication of such indexes. The national library should, therefore, not only be aware of the existence of all institutions having specialist interests but should also indicate the desirability of their bibliographical services which are not otherwise available. The national library should maintain constant contact with these institutions, providing as well as receiving information and referring to them inquiries relevant to their special subject fields. In this connexion, reports on bibliographical research in progress will be sent to the national centre which can make use of this information in answering inquiries.

Finally, it may be assumed that the national library will be the obvious focus of bibliographical inquiries from abroad. Since it will have so many points of contact with other national libraries it must be responsible initially for dealing with all questions relating to the publications issued in its own country. This is in any case an extension of other aspects of its international work and no other library can be more favourably placed to undertake this responsibility, given the experience of its staff and the strength of its stock.

Publication of catalogues

In a previous section I suggested that, if possible, the national library should be responsible for the compilation of the current national bibliography. Where the national library has this responsibility it is important that it should also prepare a retrospective bibliography of the national literature. The catalogue of the contents of the national library will provide a firm basis for the compilation of the bibliography and, until it is practicable to commence work on the bibliography, the catalogue of the national library should be published. It will be a valuable reference work in other libraries in the country, and, if the library is a large and important one, the catalogue will be useful in other countries as a substitute for a national bibliography.

Whatever the position of the national library in relation to the preparation of the current national bibliography, its responsibilities to the world of scholarship generally in bibliographical work and publication are considerable. All items—books, periodicals, maps, etc.—received must be fully and adequately described for ready consultation by readers in the library. Catalogues of the national library should be available in libraries throughout the country as an invaluable aid to scholars. The national library should therefore make every effort to publish catalogues of its holdings in printed books, manuscripts, prints and drawings, maps, etc., and should issue lists of its periodical holdings and bibliographies of the national periodical publications. The national library should likewise sponsor publication of a union list of the nation's holdings of periodicals.

Exhibitions

The most obvious means of making its collections known to the public is through exhibitions and the library should, where possible, provide travelling exhibitions to tour the country. The establishment of a post of permanent public relations officer to foster an interest in the work of the library would also lead to an informed understanding of its functions and its needs.

Desirable functions of a national library

Inter-library lending

It has been suggested in a previous section that the regulations for *dépôt légal* should include the authorization given to the national library to claim an extra copy of every publication so that it may be available for loan. In many countries the possibility of using material for lending purposes has influenced the choice of the centre for national and international loans. Where the national library is maintained as a reference-only collection, it is usual for the inter-library lending system to be based on another library or on a bibliographical institution.

There is no doubt that if the national library can lend its own material, it is a suitable place from which to organize the inter-library loan system. It has the largest stock of national and foreign literature covering all fields of knowledge; it has the richest collection of reference books and bibliographies; and it has the most experienced staff trained in the widest language and subject fields. For these reasons it has been argued that it is best suited to be the national centre for bibliographical information and the same reasons clearly apply in the choice of the national centre for inter-library lending.

As the country's focal point for bibliographical and library services, it will have the confidence of the centres in other countries which address inquiries to it for loans or for bibliographical information. It would be unfortunate if in fact there were many centres in a country performing a number of slightly different but nevertheless allied tasks. If the national library can accept all these responsibilities, this will be the most economical and satisfactory solution for the development of the country's library services.

If the national library cannot itself undertake the responsibility for inter-library lending it should ensure that this duty is accepted by another library or institution. The inter-library loan centre should be in close proximity either to the national library or to a library with a similarly comprehensive stock. Whatever system is adopted, the relationship between the national library and the inter-library loan centre should be as cordial as possible.

Manuscripts

As the central repository for the nation's published literature, almost inevitably the national library will have a large and comprehensive collection of manuscript material. It may, in fact, be the country's largest manuscript and archive centre and may therefore need to take upon itself the functions of co-ordinator of the country's manuscript and archive activities. On the other hand it may be preferable, as in the United Kingdom and France, to have a national archives repository separate from the national library and collecting all documentary material relating to history, literature, science and other aspects of the cultural life of the country. The tendency in the past has been for certain national archives to be concerned only with historical documents, so that literary manuscripts were dealt with by other libraries; on the whole, also, scientific manuscripts were disregarded. In such cases it is essential that the national library should ensure the preservation of all types of manuscripts in the country.

Research on library techniques

It has already been pointed out that the national library possesses a number of advantages over other libraries as the centre for all kinds of library activity: its staff, stock and additional bibliographical aids make it the obvious choice for any new or supplementary service. At the same time, as I have attempted to indicate, there may be some disadvantages in continuing to aim at encyclopaedic coverage and over-all responsibility. The national library should, however, be the focal point, if not necessarily the initiating centre, for research on library techniques.

If funds for staff and library accommodation are available for this purpose, the national library may be in a position to conduct its own research projects. If such is not the case, it should make every effort to stimulate research within its own country, whether by other libraries, particularly in the fields of science and technology, or by associations of librarians and documentalists. Whatever may be the solution to the problem for any individual country, it is vital that the national library should be concerned with research on library techniques, adopting any new methods which are appropriate to its needs and obtaining full information on all projects in course of development. It should therefore be the central body to which all inquiries may be addressed on this subject and it should be in a position to apply special funds for the purpose of library research.

Functions of the national library service which are not necessary functions of the national library

International exchange service

The position of the national library in relation to a country's book exchange programme has been a subject of debate for many years. There is a strong body of opinion which favours the centralization of all exchange activity but a very forceful case can also be made for complete decentralization. There are two main types of material which need to be dealt with. The arrangements made between governments or between national libraries for the exchange of official publications should be distinguished from those which concern other publications. The national library should always be the first recipient of government publications from other countries and it is a great advantage if these can be sent automatically and free of charge to the national library, in return for similar material sent directly by the government stationery (or publications) officer to the other countries.

The distribution of other types of exchange material may be the responsibility of a national exchange centre which might be housed in, and even under the aegis of, the national library. Most commonly this material is issued or published by universities and research institutions, and therefore exchanges are usually arranged directly between libraries having similar interests, so that there is no need for the service of an intermediary. University libraries often develop extensive exchange programmes on the basis of the publications of their own university presses and are thus in a strong position to make their own arrangements. Research institutes also prefer to send their publications to similar establishments abroad.

Some points in favour of setting up an exchange centre in each country are the possibility of including in its functions the issuing of lists of duplicates not required by libraries in its own country, the receipt and dissemination of lists from other countries and the distribution to other countries of lists of material from institutions which do not have regular contracts. The arguments put forward earlier for the centralization of international relationships are here again relevant to the position of the exchange scheme in relation to the national library.

Distribution of duplicates

This would not normally be a function of the national library, although some librarians consider it an important task to be undertaken on behalf of the country's library system. However, if there is no other centre to organize this kind of work, there may be some virtue in the national library dealing with it. Certainly it is a function which should be related to any centrally organized exchange system.

The arguments for and against centralization in connexion with the exchange scheme are also relevant here. Most libraries having formal exchange relations probably send their lists of duplicates to the libraries with which they have exchanged agreements, both within and outside their own country.

Of course, no national publications should be immediately offered as duplicates by libraries in the country to foreign libraries. There is a chance, particularly with older material, that it may not be in the national library or that it may have been lost. Thus the national library should have the first chance of obtaining it for its own collections. This is obviously the main point in favour of dealing with duplicates centrally, i.e., so that duplicate material may be offered to libraries within a country before being offered abroad; this may apply equally to foreign books and to the publications of the country concerned. Some control of the export of duplicate material may, therefore, be beneficial to the national book resources and the national library could be in the most favourable position to exercise such control.

Books for the blind

Special library services for the blind are not often included as a function of the national library, although the Library of Congress does so. There are a number of advantages in associating this service with a national library, particularly if that library is the country's inter-library lending centre. With its large stock and staff, its bibliographical works and possibly a union catalogue, the national library is the obvious organizer of this service. If it is responsible for inter-library lending the national library will already be in touch with all types of library in the country and will therefore readily fit the special requirements of the blind into the lending pattern.

Professional training

This is clearly not the place for a discussion of the full implications of the training of librarians, but rather of the position of the national library in relation to the system of training as it is organized in any country.

The first distinction which should be drawn is that between theoretical and practical training. We are here concerned mainly with the latter, but some comment is called for on the former. It is normally required that qualifications be given, either by a university or similar body responsible for a school of librarianship or by a library association, on completion of theoretical training in a school of librarianship. In either case, the granting of the final certificate may depend on the student's having gained some experience in practical work through employment in a library.

The nature of theoretical training need not, according to Dr. Liebaers, be different for national library staff, especially in its preliminary stages—from that received by their colleagues in other libraries; first, because national libraries have to a very large extent laid down the requirements of the profession in general, and second, because the differences between a national library and other libraries are only to a minor degree the result of differences in training. The profession of librarianship, wherever it may be exercised, is primarily

practical. Theory is certainly necessary, but is not sufficient in itself. It matters little whether the theoretical training of the scientific staff is provided by the library staff, by a school under its auspices, or by a university'.¹

It may be established, therefore, that theoretical training should be of a high academic standard and may be appropriate to potential staff of almost any type of library. On the other hand practical training must be related to the type of work to which the trainee expects to devote himself. The national library should be in a position to offer opportunities for training to those interested in becoming members of its staff and instruction for all types of academic librarians.

The national library should also be the best training ground for research librarians. Its staff usually includes experts in every aspect of scholarly library work—bibliographers, palaeographers, scientists, binders, cataloguers, etc., any one of whom may be most outstanding in his field, and for that reason the most obvious tutor for trainees. The conditions under which the student works are also excellent since the national library has the finest collection of books, manuscripts and other materials. Finally, the national library usually offers the best and most up-to-date services in the country, whether in connexion with readers, cataloguers, or book description. It is probably the most mechanized, since it has to deal with a vast amount of literature, and it has the largest library staff in the country; it should also be in touch with all the latest developments in library science both within its own country and in countries abroad.

With all these advantages for the instruction of young librarians, the national library must have a very strong sense of responsibility to the profession in its own country. It should shape the present and the future both by its example in developing new ideas and procedures and by making these known and understood by those entering the profession. It is a very necessary part of the duty of the national library therefore to be associated at least with the practical aspects of library training.

Although this section is included under the heading of desirable but not essential functions of a national library, it should be stressed that in newly emergent countries this would be an essential service to be undertaken almost from the library's inception—particularly if, as is likely, it is the only body capable of giving library training.

Assistance in library techniques

The relationship between the national library and other libraries in the country has many different interpretations. In some countries the national librarian may have no specific duties outside his own library, whilst in others he may have wide-ranging responsibilities to other libraries. The Director of the British Museum, for example, has no authority over public libraries, university libraries or even over the other national libraries like the National Central Library or the National Lending Library for Science and Technology. On the other hand, the Director of the Bavarian State Library in Munich would seem to have very clear commitments with regard to every type of library in his area, even including the accommodation for public and monastic libraries.

In the U.S.S.R. and East Europe, too, the library services are organized in various ways by one of the national libraries. These countries have built up a careful system of chains of responsibility for different types of library, from small local areas through districts, provinces and republics to national library centres. The Lenin Library, for example, offers bibliographical and methodological assistance to mass libraries (i.e., to public libraries) throughout the country. It produces bibliographies of all kinds for circulation to libraries, specimen book lists, stock lists, catalogue cards, basic rules for cataloguing and classification and

1. *National librarians: their problems and prospects*. Paris, Unesco, 1960, p. 32.

instructions concerning the special needs of readers. Other national libraries perform similar duties for scholarly libraries.

It may not always be practicable or even appropriate to provide services of this type, but the national library can give the lead in library matters in a number of different ways. Cataloguing and classification are two obvious matters for which the national library may have some responsibility. A national committee may meet to discuss these subjects, but the national library is the most satisfactory and acceptable body to issue proposed new rules.

The best example of the influence of a national library on classification is the Library of Congress, whose scheme has been put into practice not only in United States libraries but in many other parts of the world. The constant attention which is paid by the staff of the Library of Congress to changes in subject fields and the proposals for amendment which are issued at frequent intervals are of benefit to a large number of libraries.

The more technical aspects of librarianship—binding, photography and duplication, and the use of mechanical aids—present a number of special problems. Since these various technical services are usually most highly developed in a national library, it should be able to give advice to librarians on the setting up of technical departments, on preparing standards for binderies, on photocopying and on problems concerned with the preservation or repair of valuable books. Undoubtedly, national libraries as a rule are very generous in assisting other libraries to overcome their difficulties in technical matters but here again there is need for more leadership in this aspect of library service. The establishment of various kinds of standards, for example, could well be undertaken by the national library on the basis of its experience and research carried out in its workshops and laboratories.

Library planning

The foregoing would suggest that in almost every aspect of the library system in any country the national library (or libraries, if the functions are divided among several) should be the central agent, receiving information and inquiries and initiating library services for the common good. This should be the situation everywhere, irrespective of whether a country is organized centrally or is decentralized. The national library should be the prime mover in library matters and should be expected to be the leading library in all fields.

The national librarian, too, should play a central role in all systematic planning of a country's library services. He should be called in for advice and consultation on inter-library lending, on the development of libraries in new universities, on the future of the public library service and so on. He will be able to see the country's library system as a whole and the relationship of the national library to it, thus ensuring that the various strands in the organization continue to form a golden chain of responsibility for service, from the smallest to the largest library and from the richest to the poorest.